

THE JOURNAL

OF THE KENTUCKY STATE MEDICAL ASSOCIATION

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In this issue:

Health Problems in Kentucky

Urinary Tract Disease in the Female

Paroxysmal Ventricular Tachycardia-Flutter

VOLUME 56 • NUMBER 1 • JANUARY 1958

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v. 56, no. 1-6
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CHLOROMYCETIN is a potent therapeutic agent and, because certain blood dyscrasias have been associated with its administration, it should not be used indiscriminately or for minor infections. Furthermore, as with certain other drugs, adequate blood studies should be made when the patient requires prolonged or intermittent therapy.

REFERENCES:

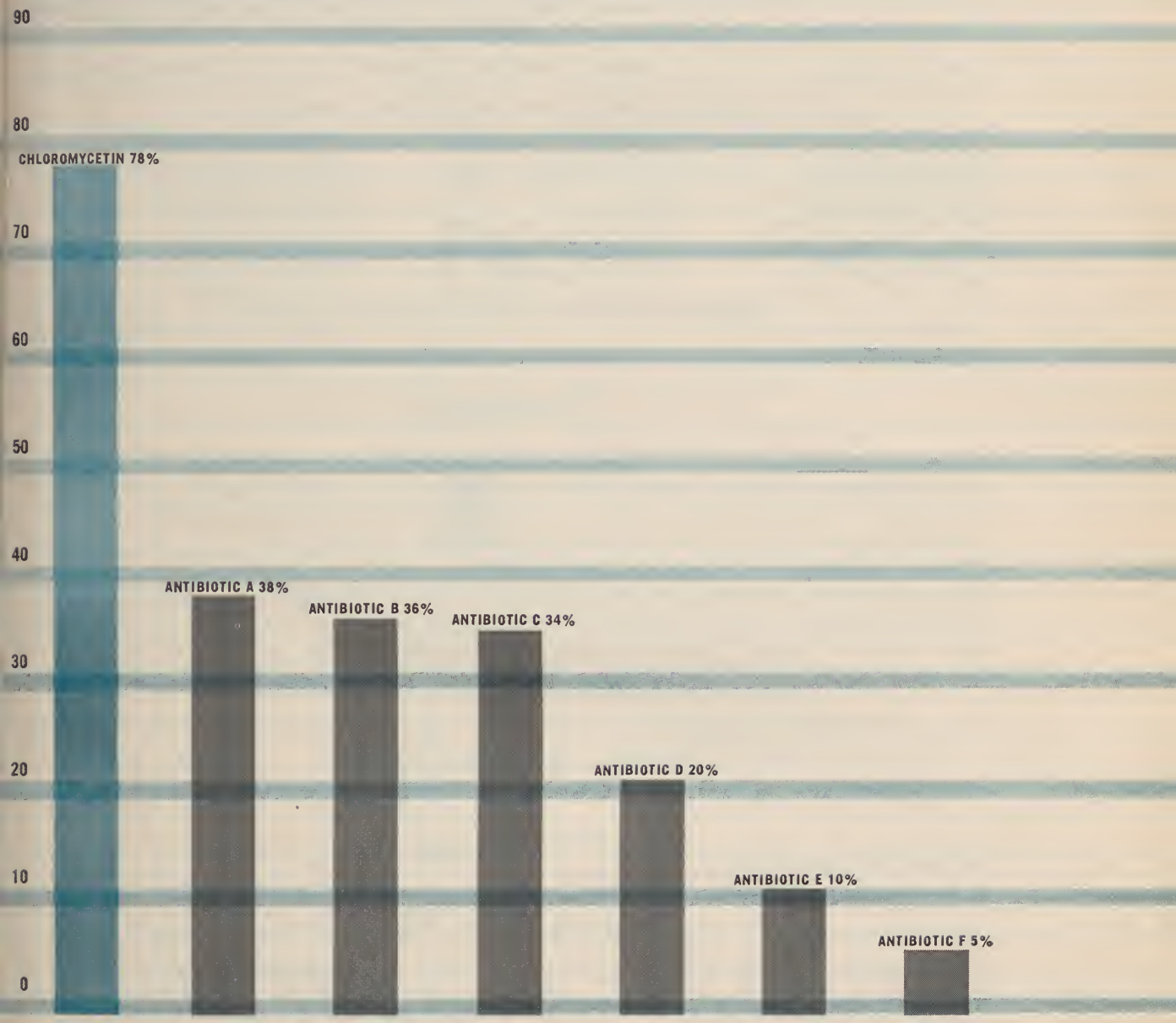
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COMPARATIVE SENSITIVITY OF MIXED PROTEUS SPECIES TO CHLOROMYCETIN AND SIX OTHER WIDELY USED ANTIBIOTIC AGENTS*



*This graph is adapted from Waisbren and Strelitzer.[15] It represents *in vitro* data obtained with clinical material isolated between the years 1951 and 1956. Inhibitory concentrations, ranging from 3 to 25 mcg. per ml., were selected on the basis of usual clinical sensitivity.

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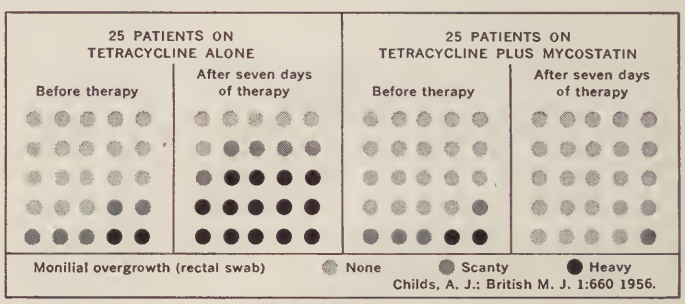
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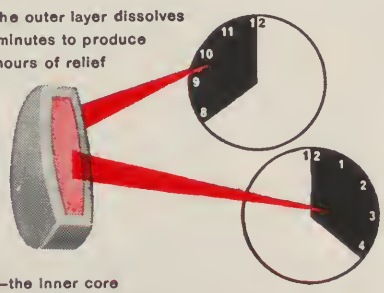
*Morrison, L. F.: Arch. Otolaryng. 59:48-53 (Jan.) 1954.

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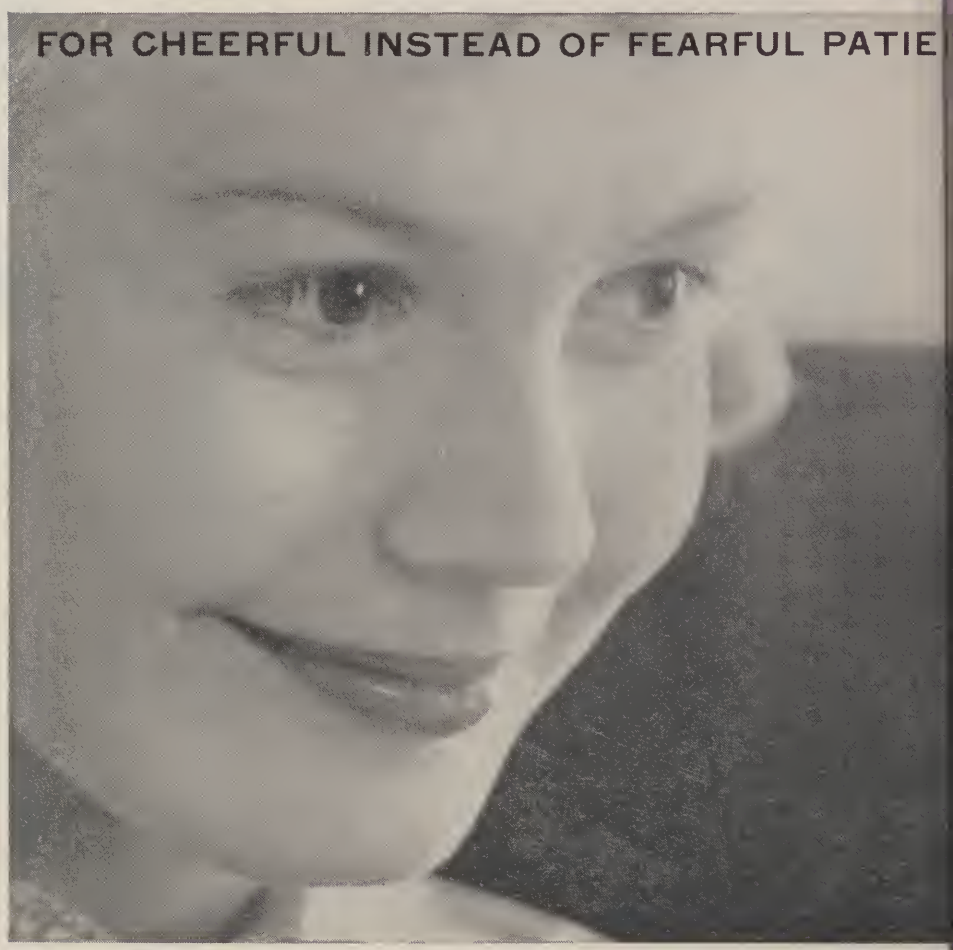
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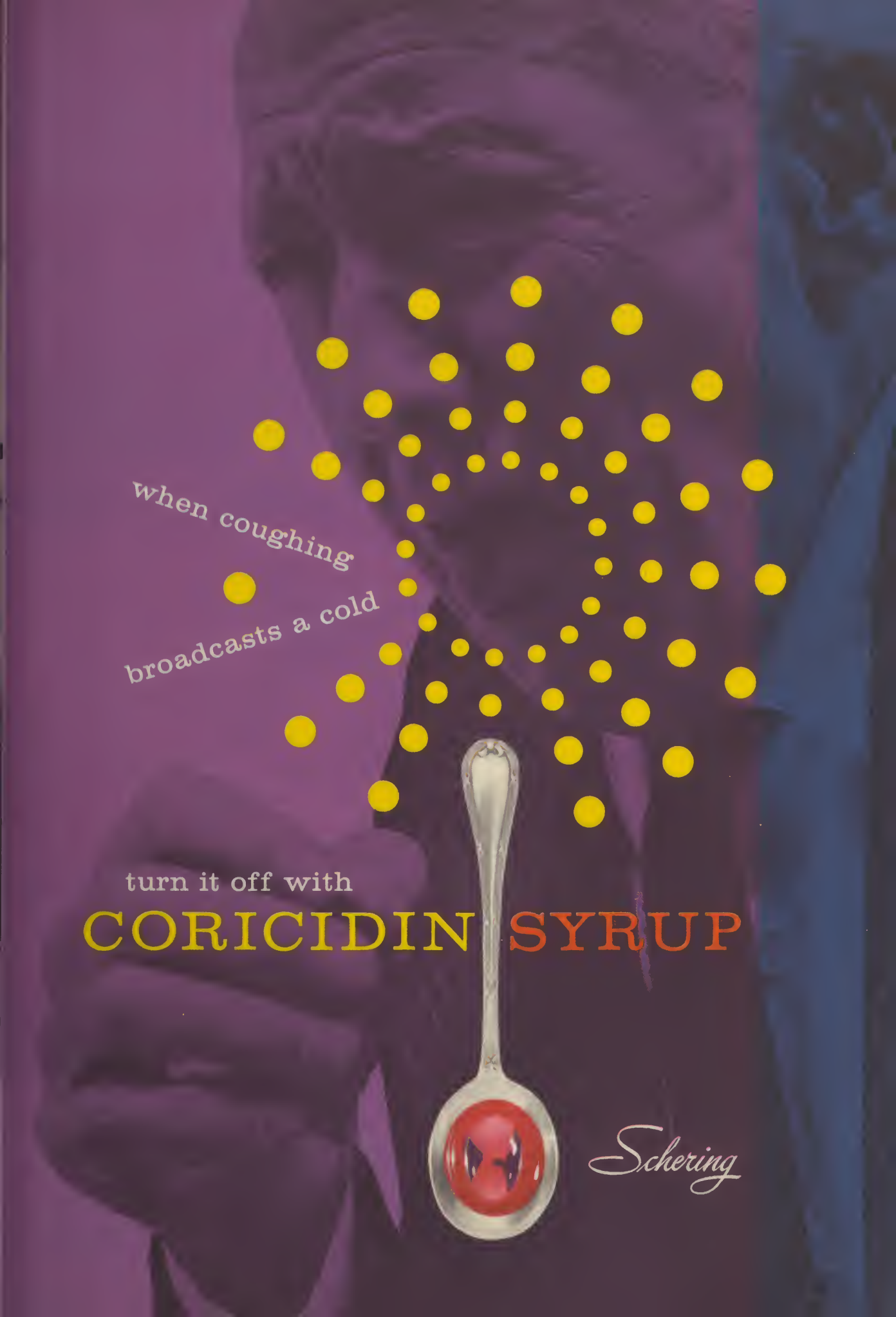
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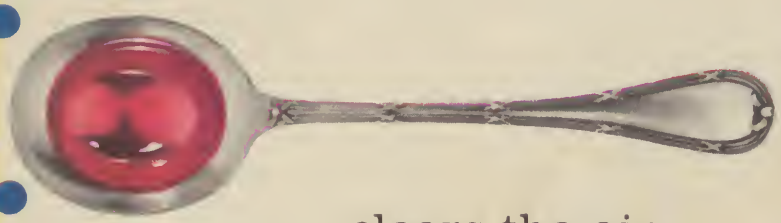
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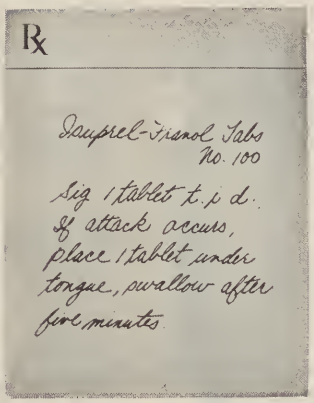
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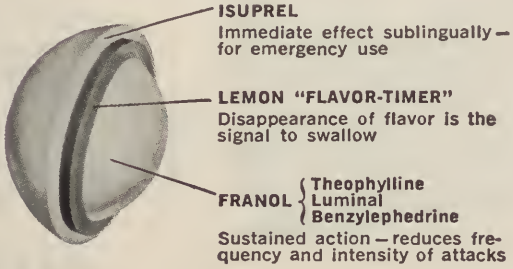
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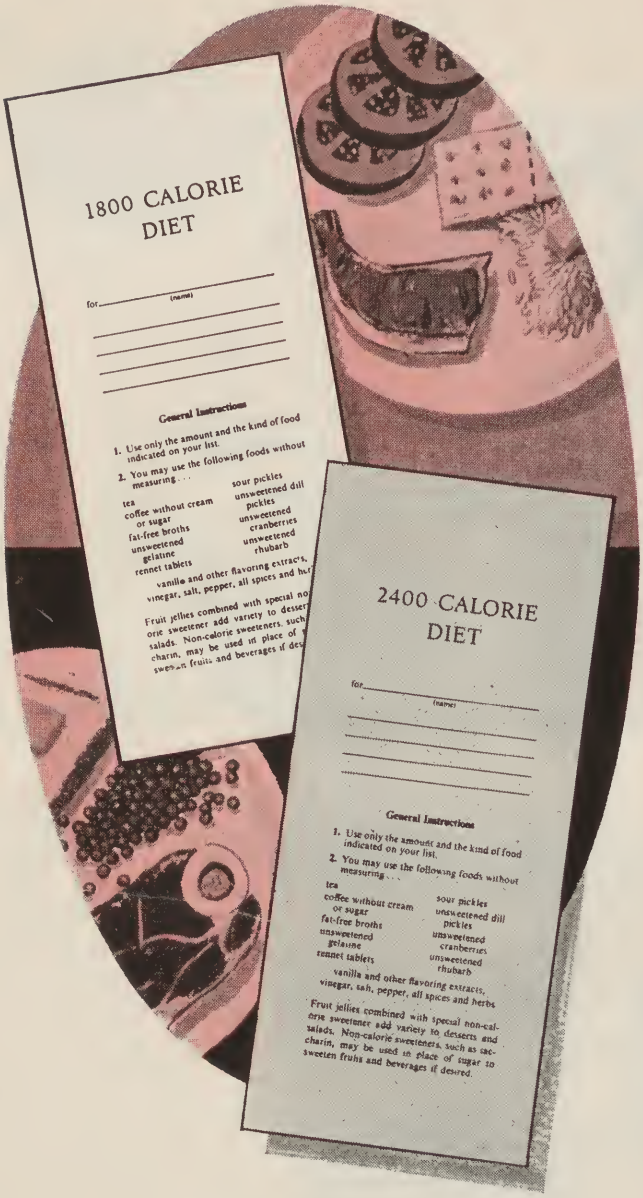
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The right to private property is part of our natural right. The State is secondary to the individual. The State exists for the individual and not vice versa. Men own things; they exercise jurisdiction over persons; they do not own people. The State is a society of individuals —a collection of individuals; it does not own the individuals. All rights have limitations either set by law or by the rights of others.

Ownership allows us to exercise control over an object permanently in our own interest, provided always in so doing the rights of others are not violated, nor the common welfare ignored. It is true that the State by virtue of the Right of Eminent Domain, when the common welfare demands it, may take over property belonging to private individuals, yet the individuals right to private property as against the State may be said to be absolute. And when the State does take over private property, then equity and common practice require an adequate compensation be given.

Nature has conceded to man, to private individuals, the right of property. For (a) nature imposes on him the duty of preserving his life. If natural law did not give man the right to private property, then nothing but brute force would enable him to accumulate and retain sufficient to preserve life. And no natural duty is based on physical power, but on moral power.

Moreover, (b) the individual has duties, which precede and are independent of the State, to provide for the material needs of his family and the education of his children. And these duties can only be filled by accumulating and retaining a variety of material goods.

And, (c) man has the right to procure for himself the imperfect happiness in this life, through the development of his rational faculties; and this is contingent on the possession of the right of private property. If this were not true, there would be no incentive to work, and consequently no progress in the arts and sciences.

Another argument, (d) is drawn from the right a man acquires to the fruit of his labor.

And finally, (e) common ownership tends to destroy individual liberty and reduces all citizens to the status of Slaves of the State. For it would be impossible to distribute the necessities and legitimate luxuries of life to satisfy the diverse wants and tastes of individuals; nor to apportion the labor necessary for the production of the various goods as to satisfy the workers themselves. The ruling powers in such economic administration would have to compel by force, both the acceptance of such goods as they deemed suitable and sufficient for each individual, and of such labor as they deemed necessary for him to perform. Individual liberty is then gone, and economic serfdom the result.

Rights and duties are correlatives. If we know what a right is, we shall have no difficulty in understanding duty. Right is the complement of duty.

A right may be defined as a moral power vested in a person, through which the individual may claim something as due to him, or as belonging to him, or demand of others that they should perform some acts or abstain from them. Mere physical power does not ipso facto carry with it the right to do a thing.

Duty is a moral obligation. Its subject a moral person, i.e. one endowed with liberty of action. Objectively, then, a duty is that which must be done or omitted; subjectively, it is the moral obligation to do or to omit to do something.

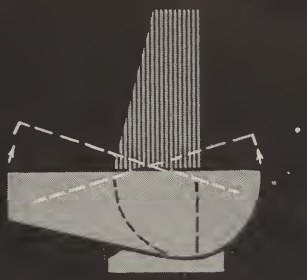
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(Continued on Page 75)

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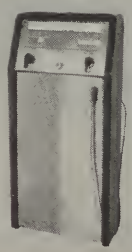
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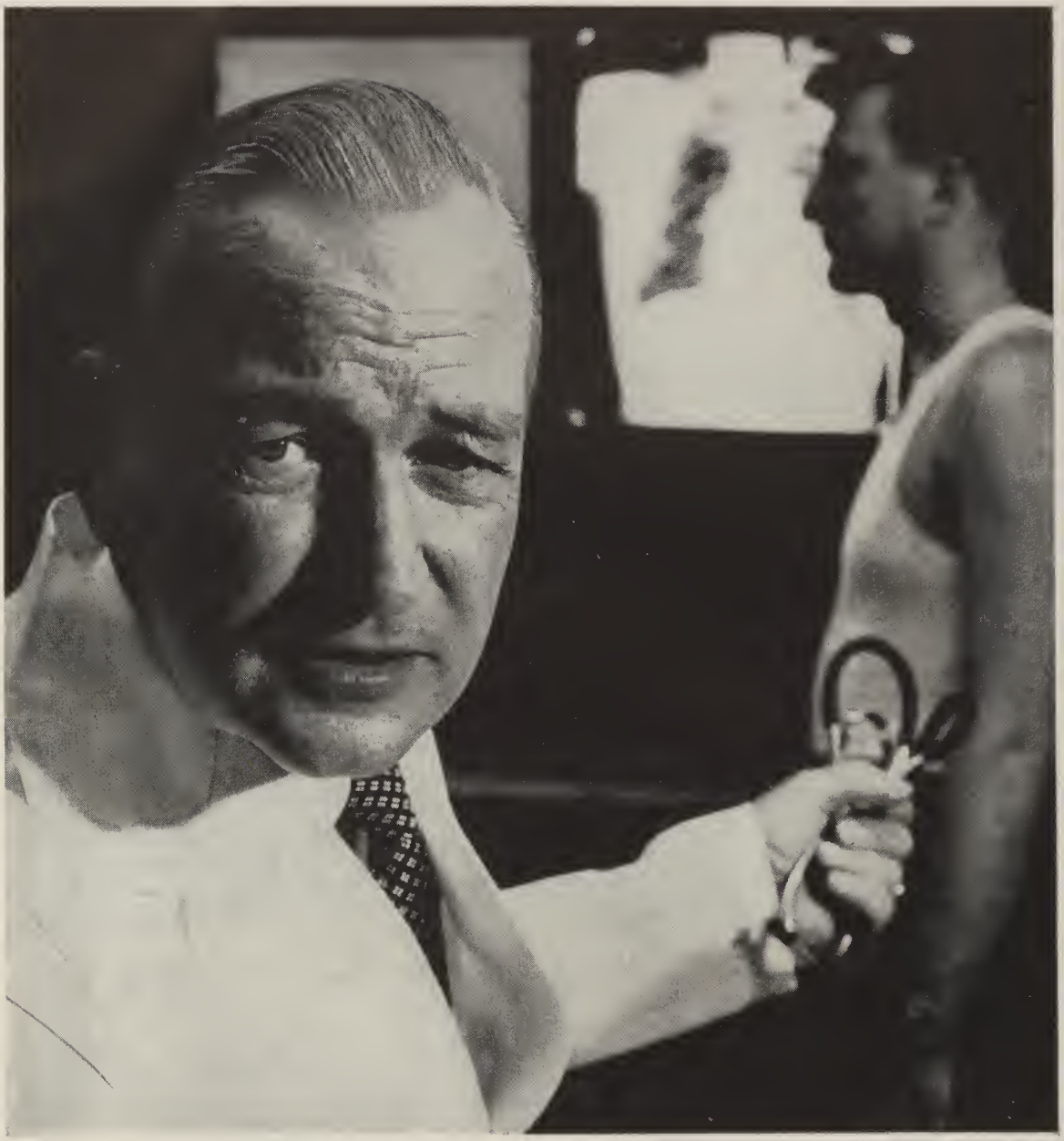
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WASHINGTON NEWS DIGEST



Washington, D. C.—Eleven years ago, in passing the National Employment Act of 1946, Congress provided for two organizations whose sole function is to promote maximum employment, maximum production and maximum purchasing power. One is Congress' own Joint Economic Committee: the other, the President's Council of Economic Advisers.

The President's Council constantly studies all forces —social as well as financial—that affect employment and production, and before each January 20 makes its report to the President, who in turn utilizes that in drafting his annual economic report to Congress.

At the same time the Congressional Joint Economic Committee is making its own separate studies, holding hearings and preparing a background of information against which to judge the President's economic recommendations when they come before it. The Congressional committee, however, is wholly advisory; it does not itself draft legislation but makes public its annual report before each March.

Although this committee is denied legislating power, its influence often directs the course of legislation. For example, a strong, one-page report from this committee is credited with keeping Congress in session after start of the Korean war and thus preventing a scheduled decrease in taxes.

When it calls in witnesses, the Joint Committee attempts to obtain a broad cross-section of opinion—the liberal along with the conservative. For this reason, recent hearings under sponsorship of the Joint Committee attracted more than casual interest. They brought together conflicting general philosophies and controversial specific issues. In the health-welfare fields, the following were some of the views:

The question of hospitalization for the retired aged through the social security mechanism was debated pro and con by the panelists. Two views:

Prof. Wilbur Cohen, University of Michigan—The former Social Security official maintains that the system can stand the drain of hospitalization for the aged. It could be done for one half of 1% of taxable income, he argued, and he would raise the latter to the first $6,600 of income instead of the present $4,200.

W. Glenn Campbell, American Enterprise Association—Congress should give the medical profession and the insurance industry a chance to work out this problem through traditional methods rather than institute a costly compulsory system with all its attendant damage to the effective practice of medicine.

Two other panelists expressed parallel views on the broader and philosophical aspects of health and welfare:

Secretary Folsom of HEW—The burdens of disease, disability, ignorance and insecurity cannot be escaped by under-investment in health, education and welfare. Such an under-investment would have a costly effect on private charities, budgets of governments, efficiency of industry and the purchasing power of consumers.

Prof. Clarence D. Long, Johns Hopkins University —An expansion of social welfare programs will have a very great stimulating effect on the economy, provided we play down those programs that involve mere charity and emphasize those that help people to help themselves.

On the day of the hearing on health, education and welfare, the panelists agreed that no crash programs in education were called for despite the scientific manpower shortages. Other comments on education:

Professor Paul J. Strayer, Princeton University— Either federal aid will be forthcoming on terms that can be acceptable to the states or we will suffer a general deterioration in the quality of education.

President Howard R. Bowen, Grinnell College— Federal aid should not be granted directly to colleges and universities but through intermediary non-profit corporations controlled by boards of trustees made up of distinguished citizens.

NOTES:

A possible indication of legislation in 1958 comes from a December tour of southern medical schools by members of the House Interstate and Foreign Commerce Committee's health subcommittee. Among other things, they were concerned with the schools' need for more laboratories and classrooms.

The Department of Health, Education, and Welfare has started a 12-year study on the activities of a group of 3,000 newly retired men and women.

Between July 1 and mid-December, almost half the population of the country had been taken ill with an upper respiratory condition, including Asian influenza.

Community-wide chest X-ray campaigns to detect tuberculosis, long a popular public health device, now are in disfavor with U. S. Public Health Service. PHS recommends instead that tuberculin skin tests be used generally with chest X-rays reserved for selective groups likely to have high incidence of the disease.

In its first year of operation, Medicare spent $43 million, with $22 million going to civilian physicians and $21 million to civilian hospitals; administrative costs ran about 3%. Some claims are still pending.



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IN THE BOOKS



ONE SURGEON'S PRACTICE: by Frederick Christopher, M. D.; Published by W. B. Saunders Company, Philadelphia and London, July 30, 1957; 151 pages; Price, $4.00.

This is a timely book written by a competent surgeon after retirement. His philosophy is outstanding all through the book.

He covers the vital question of who shall study medicine, stating that the family doctor can play a major role in this by selecting the right boy—one who is kind and a good student—and by encouraging him to begin while young.

Choice of school and location is well covered, and the opportunities offered by many rural hospitals to the young man who will adapt himself to the study of medicine are explored.

The contribution of outside activities to a physician's success was stressed by the author who said that the doctor must enter into them with sincerity and not for the purpose of gaining patients.

Chapters on "Surgical Judgement," "Composure in a Crisis," etc. are well written. Philosophy contained in these chapters is that the surgeon must always be humble and that judgement can be gained only in time.

Excellent chapters on "Surgical Teaching and Writing" contain the thoughts that serious study on any subject is research and that it may be done anywhere. Great discoveries often come from obscure places. The author says that the physician should teach and write when he has something worthwhile.

Good advice is given in chapters 12 and 13 on personal injury litigation and surgical fees. Here the author says not to criticize the other doctor, for later you may make the same error yourself. He urged that physicians never overcharge and that they consider the patient's ability to pay.

The chapter "Rewards of a Surgeon" is also well written. The entire book is one which both old and young can read with interest.

C. C. Howard, M.D.

THE SPINE JACK OPERATION FOR SCOLIOSIS: by H. Leslie Wenger, MD., in pamphlet form, published privately by Doctor Wenger, 44 Gramercy Park, N., New York 10, N. Y., 186 pages.

This book was written by a courageous surgeon, and he has used a very radical method for the treatment of idiopathic scoliosis. The book reviews all the cases which he has done, and it shows notably that such surgery is not without extensive danger, complications, and even death.

The methods which he has used are experimental and should be improved by animal experimentation before using them in human operations. With the number of complications and morbidity following the use of this method, I can not see how it can be recommended for anyone, and I believe Dr. Wenger's enthusiasm and zeal have carried him along too far in recommending such treatment to orthopaedic surgeons.

Certainly I would not advise such treatment for a patient unless there was close co-operation between neuro-surgeons and thoracic surgeons in performing such surgery.

By the use of this method there were 3 deaths in 49 cases of spinal surgery. The ordinary mortality rate in scoliosis fusions for idiopathic scoliosis is way under one per cent, and the lesser complications are usually minimal.

The book can not be recommended for close study and reading except for one who is an experienced orthopaedic surgeon intimately concerned with spinal fusions for scoliosis.

K. Armand Fischer, M. D.

PSYCHOPATHIC PERSONALITIES: by Harold Palmer, M. D.; published by the Philosophical Library, Inc., 1957, 179 pages, price, $4.75.

This short compilation of essays on the general field of psychiatry is written by a British psychiatrist who has written a previous book of clinical essays entitled "Philosophy of Psychiatry." The title is taken from the first of the essays but the book covers the general field of psychiatric illnesses. The author has written the book in a very interesting and readable style since he hopes to achieve a mode of presentation of psychiatry acceptable to workers in other disciplines, including those concerned with the management of human beings.

The author set forth in his essays his own particular theoretical approach to the various emotional illnesses. He gives some illusions to other frames of reference and frequently alludes to psychoanalytic theory in a generally negative fashion.

Most of his discussion is of a very superficial nature and is of little help in really understanding the basis for, or treatment of, specific psychiatric illnesses.

The essay on "Hysteria" is very interesting in many respects but is full of the vague generalizations which fill the book but convey little that is useful, e.g. "Hysterics are more commonly female than male, are likely to exhibit preponderance of linear over horizontal growth and as a class are somewhat below the average in intelligence." In discussing the treatment of hysteria, the author suggests "persuasion," "encouragement" and "admonition," yet he does not indicate how such moral attitudes will effect the "subconscious etiology."

While this little book is not intended to be a clinical treatise, it is not very satisfactory even as a general discussion for workers in other disciplines. The vagueness and generalization combine to give a most clouded picture of the entities described. One must put in a good word, however, for the author's sense of humor and his frequent jabs in his own direction.

George F. Doyle, M. D.



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PUBLIC HEALTH PAGE

A Long Range Plan of Medical Care for the Indigent Persons in Kentucky

Russell E. Teague, M.D.
Commissioner of Health
Commonwealth of Kentucky

In October 1956, Governor A. B. Chandler appointed a Commission on Indigent Care consisting of a chairman and twelve members, including representatives of Kentucky State Medical Association, Kentucky State Hospital Association, Public Health, Public Welfare, Industry, Labor, Consumer and Rural Health Organizations. The following persons representing the medical profession were appointed on the Commission: Thomas P. Leonard, M. D., Frankfort; Gaithel Simpson, M. D., Greenville; Keith Smith, M. D., Corbin; William R. Willard, M. D., Lexington; and Russell E. Teague, M. D., Louisville, who was appointed Chairman of the Commission.

Governor A. B. Chandler indicated that the duty of this Commission is to investigate, study and make a survey of matters reflecting upon the feasibility and possibility of providing hospitalization and related care for indigent sick persons in Kentucky. The following relates the significant findings and recommendations of the Study Commission.

At least one out of every eight Kentuckians—400,000 persons in all—are unable to pay the cost of necessary medical care. Nearly all of these men, women, and children must depend upon the services provided free by physicians, hospitals, and other suppliers of medical care or they must go without such care.

This is an inequitable situation. Not only does it place an unfair burden on the suppliers of medical care, but to the extent that the costs of free services are passed along to paying patients, it adds to their burdens at a time when they are already facing heavy medical care expenses. Moreover, many indigent persons go without needed medical care because through pride or ignorance they fail to seek free services or because some groups of suppliers are unable to provide services without charge.

It would be more just and equitable to spread the costs of medical care for the indigent among taxpayers. Futhermore, it is an accepted responsibility of all the people through government to see that medical care is provided for indigent persons. In view of these considerations and because it is in the public interest to preserve human values and minimize dependency due to illness and disability, this Commission recommends that the Commonwealth of Kentucky undertake the development of a medical care program for its indigent citizens. Achievement of attainable objectives calls for a medical care program that is comprehensive, emphasizing prevention and rehabilitation as well as treatment of disease.

Tax supported medical care for the indigent should and can result in improved health care for the total population. Adequate payment for care rendered to indigent persons would enable hospitals and nursing homes to improve and broaden their services because it would relieve them of the financial burden of providing free service for the indigent. Also, lower rates could be charged the public for hospital and nursing home care than otherwise would be charged. Tax-supported medical care for the indigent would help to alleviate the shortage of physicians in rural areas. Adequate payment to physicians for services to the indigent in rural areas where the economy is poor and physicians are scarce would help to attract physicians to these areas.

Although the broad public interest must be of uppermost concern, the administration of the program should utilize the technical competence of people in the health field. Therefore, the Commission recommends that the policies of the program be determined by an Advisory Council composed of lay and professional members; that the Department of Economic Security administer the program in accordance with the determinations of the Council; that the Health Department be given responsibility for the medical aspects of the program by means of a contract with the Department of Economic Security; and that various technical advisory and local medical review committees be established as described in the Commission's full report.

In its recommendations, the Commission sets forth a sequence of steps by which sure and orderly progress can be made in developing a comprehensive program for health care of the indigent. Even if State funds are not available at this time to initiate a comprehensive program, the estimates of cost show that a start can be made on the program with a lower appropriation. A limited program could be extended gradually in future years to become more comprehensive. Increases in appropriation to make possible such future extensions would tend to be offset by reduction in appropriation required for Old Age Assistance, resulting from a declining caseload as more of the aged become eligible for Federal Social Security benefits.

To initiate the program, an initial State appropria-

(Continued on Page 75)

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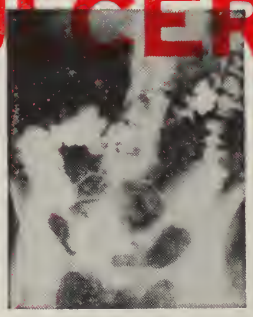
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†Ayd, F. J., Jr.: The Treatment of Ambulatory and Hospitalized Psychiatric Patients with Trilafon, presented at Ann. Meet., Am. Psychiat. Assoc., Chicago, Ill., May 13-17, 1957.

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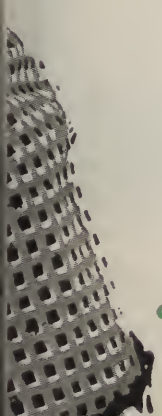
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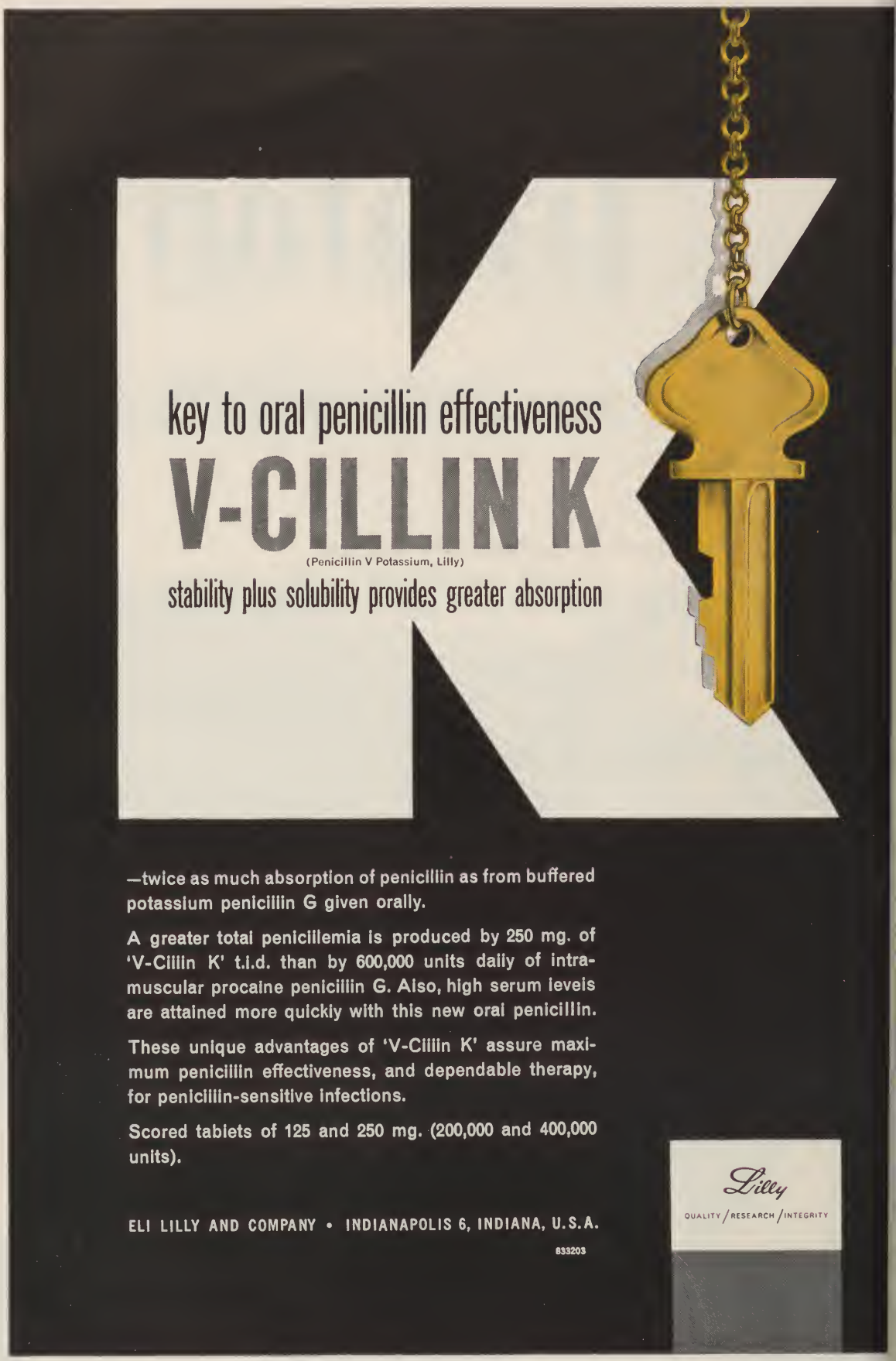
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The JOURNAL of the
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CLINICAL EXPERIENCE WITH ORAL HYPOGLYCEMIC SULFONYLUREAS

James Robert Hendon, M.D.**
Louisville, Ky.

THE search for an effective oral hypoglycemic agent which might be helpful to patients with diabetes mellitus has been a persistent one. Many preparations have been proposed but their hypoglycemic action was not substantiated or they were found to have dangerously toxic properties. Notable among these was decamethylene diguanidine or Synthalin which reduced blood sugar and urinary ketone excretion but had serious hepatotoxic and nephrotoxic effects.

In 1942 Janbon and co-workers demonstrated hypoglycemic effects in man with a sulfonamide compound. Later Loubatieres reported on the mechanism of action of such preparations, and Holt and others called attention to functional impairment of islet alpha cells in 1954.

In 1954, during investigation of a sulfonamide compound (1-butyl-3-sulfonilyl urea, BZ 55, carbutamide) symptoms of hypoglycemia in man were noted and it was found that blood sugar levels were, in fact, lowered. This effect was accomplished without sacrifice of bacteriostatic properties.

Certain workers felt that retention of bacteriostatic effect was not desirable in that it might lead to development of resistance to the drug through action on intestinal flora. Another compound, (U-2043 1 butyl-3-p-toluenesulfonylurea, tolbutamide, Orinase®) was tested and used experimentally and clinically. This preparation possesses no bacteriostatic effect but with respect to hypoglycemic action is as effective as BZ 55. It is available commercially as Orinase. Carbutamide was withdrawn from clinical investigation early in 1957.

Effects

As far as is presently known there is no difference in the pharmacological properties of these two compounds. A single dose of 2 or 3 grams is followed in 3 to 6 hours by blood levels of 10 to 15 mgm. per 100 cc. After 6 to 7 hours the blood level begins to decrease and this continues slowly.

Usually within 2 to 3 hours after the first dose of the sulfonureas a decrease in blood sugar can be noted. In experimental animals and even in diabetic man this can progress to hypoglycemic levels, though it is most unusual to see this in practice. There is experimental and clinical data to indicate that the compounds have a more pronounced hypoglycemic action if they are given in solution in sodium bicarbonate. The hypoglycemic tendency is sustained as long as blood sulfonamide levels remain in the maximal range and they can be satisfactorily maintained there by daily administration of the drug. Conflicting thought exists as to whether hypoglycemic response follows an all-or-none law, some observers feeling that a larger maintenance dose is required to sustain an optimal blood sugar level in some diabetic patients, than in others. In our experience it seems true that some of our patients can hold a satisfactory blood sugar figure on 0.5 gm., while others require 1.0 to 1.5 gm. daily. Whether this may be due to differences in excretion or to some factor in their disease is not known.

**Assistant Professor of Medicine and Chief of the Section on Endocrinology, University of Louisville School of Medicine.

Toxicity and Limitations

Acute and chronic toxicity experiments have indicated that the compounds are relatively nontoxic. Among several thousand patients treated in this country some deaths have occurred, but a causative relationship between the drugs and the mortality has not been definitely established. Impacting crystalluria has occurred in animals, but only when doses far in excess of therapeutic ones were administered. There have been occasional cases of drug fever or drug rash (one in our experience) and occasional reports of nausea, vomiting, diarrhea and headache, not clearly attributable to sulfonurea administration.

It is generally agreed at present that not all diabetic patients will respond to carbutamide or Orinase. Excluded from their effectiveness are cases of pancreatectomized or alloxanized subjects, juvenile or brittle or labile diabetes, the hyperglycemia resulting from hyperadrenocorticism or associated with acromegaly, diabetic ketosis, or other acute stress situations in the diabetic. This exclusion is not a final one, however, because there have been reported cases of the Cushing syndrome which responded to the drugs and at least one case of an adolescent, highly labile diabetic who was able to discontinue insulin entirely under the influence of Orinase. The resolution of this conflicting evidence must await further experience.

It can be quite safely said that the sulfonureas have no place whatever in the treatment of diabetic coma, and a position definitely secondary to insulin in exacerbations of diabetes due to infection or other stressful situations.

There is no evidence that these drugs have any salutary or other effect on the retinopathy, nephropathy or neuropathy of diabetes.

Choice of Patients

It must be said that no definite common denominator for the effectiveness of the sulfonureas has, as yet, been found. Most frequent success has been met, however, in a certain category of diabetic patient. This is the individual past forty (and the farther past it, the better) whose diabetes is of the stable type, who has little or no tendency to ketosis and who is fairly well regulated on small amounts of insulin or on diet alone. Such patients may usually have their insulin omitted on the day sulfonurea therapy is begun.

In our early experience toward the end of 1955 we varied the dosage greatly, sometimes using 6 grams daily. Later, however, we gave 3 grams of either drug on the first one or two days, then 2 grams daily until hypoglycemic action seemed to permit reduction of dosage to 1 or 0.5 grams daily. Whether it matters if the daily dose be given at one time or in broken doses is not known. Largely because medication would seem less formidable to our patients we have usually given the tablets in divided doses initially. An equal number of grams of sodium bicarbonate has been given to some patients; we have not noted any evidence of increased effectiveness from this. This plan of therapy is frequently followed by descent of blood sugar values to the range of normal within the first three days. Occasionally (as will be demonstrated later) a delayed response is noted. We feel that therapy should not be pronounced a failure unless no response is seen after fourteen days of continued medication. Dr. Garfield Duncan and others have devised what might be called sulfonurea response tests in which the drug is given in one full dose and blood sugar determinations are made over a period of several hours. In our experience such procedures might eliminate from therapy certain patients whose response is delayed.

Cases of Doubtful Suitability

In agreement with the experience of others, we have found the effectiveness of the drugs in unstable juvenile diabetics to be negligible. One female of 19 who had been diabetic for 6 years was hospitalized for a therapeutic trial. After six days it seemed obvious that no reduction in blood sugar or abeyance of ketosis was occurring. She was discharged to pursue her usual insulin dosage. On returning home she found it necessary to reduce her insulin ration progressively to nearly half her original dose. After a week of this dosage insulin requirements increased to the previous amount. The drug was again used. She is now taking 42 units

of insulin and 2 gm. sulfonurea daily whereas she previously took 65 units. The instability of diabetes remains unaffected. The value of this modification of a diabetic patients program is highly debatable.

Thus, the insulin-deficient and the insulin-resistant patients seem to represent the two extremes as regards effectiveness of sulfonureas. Since, in any case, we do not know what diabetes mellitus actually *is*, and since the mode of action of these hypoglycemic agents is not yet clear, we are likely to encounter exceptions in both groups. Also, there exists a large "middle group" of diabetics whose characteristics partake, to a greater or lesser extent, of the features of the other two. The metabolic aberrations of this group merge imperceptibly into the others, hence it cannot be otherwise typified. It can only be said that, within this group, the more a case of diabetes conforms to the diabetes-of-old-age type, the greater are the chances of effectiveness of sulfonureas; as the youthful type is approached, the reverse is true.

Initiation of Therapy

In the case of patients in this middle group, particularly where insulin requirement is high and insulin dependence fairly great, it is wise to continue to administer insulin in lessened dosage during the first days of sulfonurea therapy.

In our first usage of the drug we insisted that our patients be hospitalized for initial therapy. Later, we treated most of our cases from the start on an out-patient basis. Those individuals whose renal threshold for sugar is not excessively high are asked to keep a close check on the sugar content of the urine, and post-prandial blood sugar determinations are made fairly frequently until the response is known. At the present we continue to hospitalize for initial therapy patients with vascular disease in whom hypoglycemia might precipitate an accident.

Illustrative Cases

The following cases will demonstrate some of our clinical experiences. In the figures a blood sugar value is given for each hospital day. This value is the average of two or three blood sugar determinations made two hours post-prandially. We have noted, and cannot explain, that quite frequently the blood sugar determined after breakfast was the highest of the day.

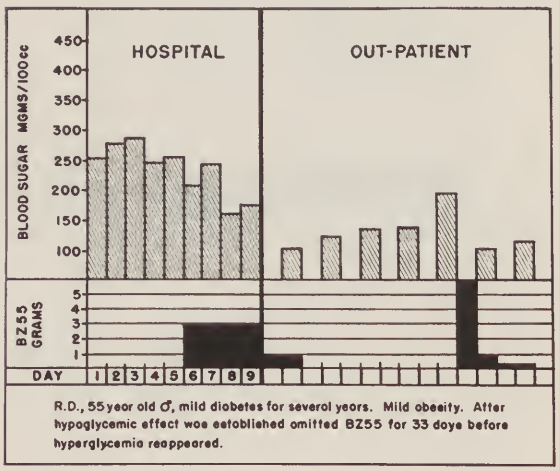


Fig. 1: Mr. R. D. had been known to be diabetic for about 5 years. He had never taken insulin and hyperglycemia had never been well controlled. He made a fairly prompt response to carbutamide, dosage was gradually reduced, and later the drug was discontinued. He continued to maintain satisfactory blood sugar levels for 40 days and then hyperglycemia recurred. He again responded to sulfonurea therapy and presently takes 0.5 gram Orinase daily.

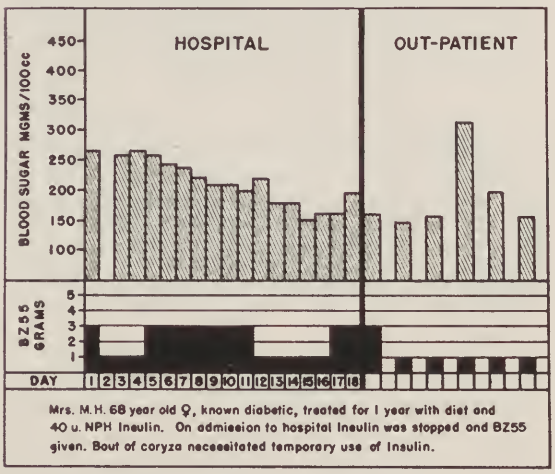


Fig. 2: Mrs. Mary H. had been known to be diabetic for 3 years. She was well regulated on 50-60 units of insulin. At the initiation of oral therapy insulin was omitted. Blood sugar declined and normoglycemia was maintained on 1 gram of carbutamide. A mild respiratory infection resulted in hyperglycemia and depot insulin was required temporarily.

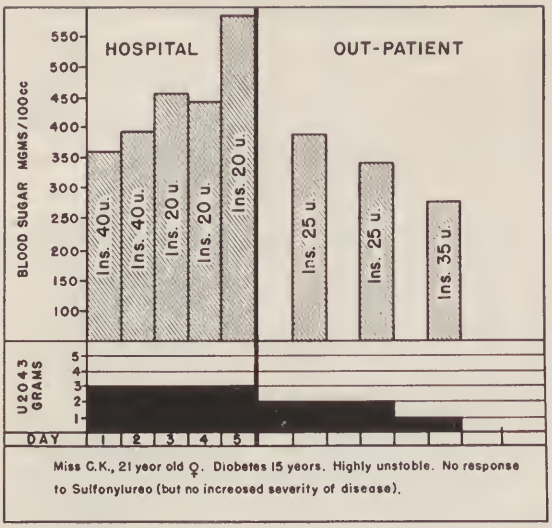


Fig. 3: Miss C. K., aged 20, had had diabetes since the age of 6 and her disease was extremely labile. Insulin dosage during the trial with Orinase was about half her usual requirement, and there was no further response even on continued therapy.

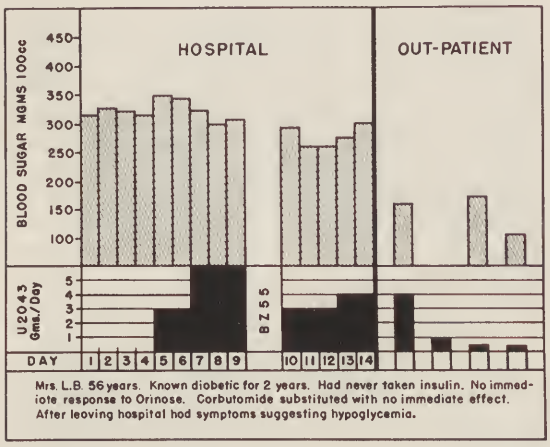


Fig. 4: Mrs. L. B. had been known to have diabetes for 4 years and had not taken insulin. There was apparently no response to Orinase and Carbutamide was substituted. Seemingly no response had occurred after ten days total treatment. Through an error she left the hospital and continued to take Carbutamide. Shortly thereafter she experienced several mild attacks suggestive of hypoglycemia and lowered blood sugar values were found. Normoglycemia is maintained at present by 0.5 gm. Orinase daily.

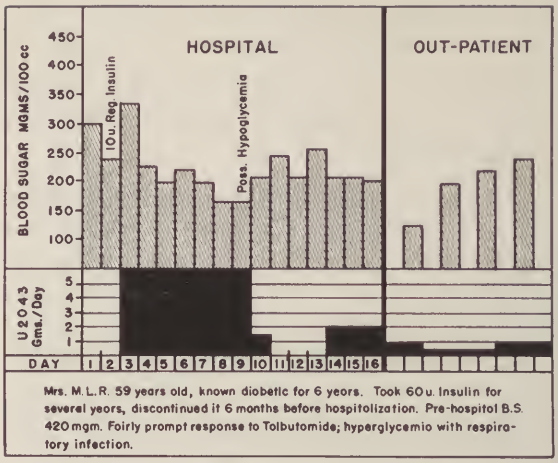


Fig. 5: Mrs. M. L. R. had been treated for diabetes for 3 years, taking 60-65 units insulin. In the hospital she responded to Orinase without insulin and while there experienced symptoms of hypoglycemia. Unfortunately, no blood sugar determination was made during the period of these symptoms. She also had a respiratory infection later with hyperglycemia in spite of the sulfonurea therapy.

Conclusion

We have not had the opportunity of testing the effect of these drugs in the hyperglycemia of the Cushing syndrome, chromaffinoma, thyrotoxicosis or acromegaly.

The sulfonureas have presented us with a new facet of treatment of diabetes mellitus. Whether their use constitutes an advance remains to be seen. In diabetes we meet with a mysterious metabolic blunder, and hyperglycemia and ketosis are its more dramatic manifestations.

Whether the projected course of the disease will be altered by these hypoglycemic agents is unknown.

In any case, it is imperative that the effectiveness of the sulfonureas not be over-rated, to the exclusion of other measures, for instance, weight control. If used in such a way, they can only bring disservice to our patients.

Time's the king of men,
He's both their parent, and he is their grave,
And gives them what he will, not what they crave.

—Shakespeare

AN APPROACH TO HEALTH PROBLEMS IN KENTUCKY*:
The Implication of Classifying Hospital Patients by the Type of Care Required

RICHARDSON K. NOBACK, M.D.,**
Lexington, Kentucky

IN any consideration of health problems hospital care will be recognized as a major item. The urgency and severity of medical conditions leading to admission, the expense of the care which is provided, the necessity of travelling to the hospital, and the desirability of providing continuity of care, all combine to make hospitalization one of the important elements in a community's health program. This is true for all hospitals but it has special validity for the acute general hospital.

The Problem

In a health program it is necessary to provide the most adequate care available, to make the best use of the personnel available, to provide the most effective facilities, and to make the most economical use of these resources. These are desired and indeed vital goals which have particular validity when a new hospital and medical care program is being developed. It is necessary for the planning staff at the University of Kentucky to explore methods of providing medical and hospital services as well as to examine possible organization of hospital services which may help achieve the goals just mentioned. Though the varied problems which confront the modern acute general hospital are well known, I would like to mention a few. There is a general shortage of trained nurses, there is a high rate of staff turnover, the nursing service is faced with varying demands for services, and there is a necessity to strive for continuity of both medical and nursing care. These comments apply particularly to the nursing service personnel and yet they have direct influence on the quality of care which is available and on the teaching program which is one of the main reasons for a University Hospital.

For these reasons, it seemed wise to analyze the needs of patients in an acute general hospital. With this information one may explore the implications of attempting a categorization of patients in terms of the type of care required. This separation of patients in accordance with different needs occurs within the total hospital program through the provision of both in-patient services and out-patient services. Within the hospital this separation takes place in the recovery room to the extent that special provisions and facilities are made available for those with special needs. In some hospitals special care units have been developed to extend recovery room type of service in time and to non-surgical patients. At the other extreme of need, some minimal care units have been established for those patients who require some supervision and assistance but who need direct nursing attention relatively infrequently.

Demands To Be Met

These facts suggest additional consideration of the demands which are placed upon the acute general hospital. Are these demands met best by providing on the general medical and surgical floors both staff and facilities which are available for different patients as individual needs dictate? The size of the floor staff, its skills, and the duties it has to perform often vary; there may be similar variation in the skills and background of the private duty nurses whom we hope are available in order to supplement the floor staff. The result is often an uneven distribution of the available nursing care.

Some patients in the hospital require much less care than others yet the acute general hospital bed is often the only hospital facility available to meet the needs of such patients. When there are several seriously ill patients on the floor, those patients who are relatively well often receive less attention than the nursing service would desire.

These varying factors and the success of the recovery room suggest the need to explore various approaches to providing care as related to the level of need of individual patients. Nursing studies have suggested the value of considering patients' needs as related to the degree of physical dependency rather than as related to the particular diagnosis. When one goes further, and attempts to learn what proportion of patients within acute general hospitals require either the highest level and amount of nursing service or the least amount, one finds relatively little objective information.

**An address before the Kentucky Public Health Physicians at the KSMA Annual Meeting on September 18, 1957.*

***Associate Professor of Medicine, Medical Center, University of Kentucky.*

Method of Study

With this background, the University of Kentucky planning staff decided to undertake a study of the nursing care required by patients in an acute general hospital which is an integral part of a University Medical Center. Because of many similarities to the type of operation which we expect at the University of Kentucky Medical Center, the following studies were undertaken at the University of North Carolina Memorial Hospital. Study forms were developed and then prctested at the Hospital of the Good Samaritan in Lexington. These forms were taken to Chapel Hill wherc the study team received invaluable assistance and cooperation from Dr. Robert Cadmus, Mr. Eugene B. Crawford, Miss Cheeks, nursing supervisors, and head nurses.

The study forms were designed to include identifying data for each patient as wcll as the diagnosis and information about his general situation. The main portion of the forms was designed to permit recording of all services provided patients within the nursing unit; this included all items of pcrsonal maintenance (such as washing, bed maintenance, and feeding), all diagnostic and therapeutic procedures (such as medications, oxygen, and nasogastric tubes), and other attentions (such as intake and output recording, observations, and instruction). In all, approximately one hundred twenty items of information were called for on each patient. Both the service provided and the number of times it was provided were recorded together with comment about any factors which made the provision of this service either particularly easy or complicated. The study period for each patient extended throughout twenty-four hours. The study forms were filled out by the head nurses who had been briefed about the project. The survey team was available to discuss problems and frequently assisted the nurses in collecting and recording the data. The basis of observation consisted of the information in each patient's chart and the head nurse's familiarity with the needs of her patients. Observations were obtained for every patient who was in the University of North Carolina Memorial Hospital.

Each completed form was reviewed by the study team to make an estimate of the type of hospital facility which might meet the patient's needs best. The detailed information available enabled us to have a rather thorough picture of the patient's condition and then to judge whether each individual item of service might have been provided by a Registered Nurse, a licensed practical nurse, or by the aide and orderly group.

Results of Study

It became apparent quickly that patients could be classified easily into one of four major groups. The first group contains those patients who were the most critically ill. These patients required a great many services. There was great urgency in providing these services and very frequent observations were commonly needed since life was often in jeopardy. To this group we have given the designation "Critical Care."

A second group consists of those patients who required many services but where there was not thc urgency just mentioncd. This group has been designated as "Intensive Service." The third group of patients required many services but considerably fewer than those of the first two groups. There was not great urgency in providing these services. This group has been designated "Standard Care."

The fourth group consists of patients who required some supervision, were up at liberty, needed few services, and often needed only a few oral medications. This group was designated "Minimal Care." It is worth noting that no patients were placed in the last category if continuity of care might have been interrupted (for example, a patient who entered one day for elective surgery the following day was not placed in this grouping).

Limitations of Study

The accumulated data present detailed information based on a twenty-four hour sample of needs of every patient in the hospital. Limitations for some analysis result from the twenty-four hour sample period; however, gencral study of distribution of patients between the four groups and the type and frequency of services needed by patients in each group seem justifiable. The material which follows is based on patients of the medical and surgical services only. Patients on obstetrics, pediatrics, and psychiatry have special requirements which are met with separate facilities in most hospitals. The information which we collected about such patients will not be reviewed at this time.

Table I indicates the distribution between these four categories of the one hundred ninety-three patients on the medical and surgical services (the distribution is approximately the same

TABLE I*
Number and Per Cent of Patients By Level of Care

Level of Care	No. of Patients	Per cent
4—Critical Care	18	9.3
3—Intensive Service	21	10.9
2—Standard Care	137	71.0
1—Minimal Care	17	8.8
	193	100.0

These figures pertain only to the medical and surgical services.

between medicine and surgery). In round figures, nine per cent of patients are in the Critical Care group, ten per cent in the Intensive Service group, seventy-one per cent in the Standard Care group and nine per cent in the Minimal Care group. It is pertinent to observe that there was considerable pressure for beds at the University of North Carolina Memorial Hospital; in other words, only the sickest patients tended to be admitted and so the Minimal Care group is smaller than it might be in another situation.

Personnel Requirements

Table II presents an analysis of the personnel needed to provide nursing care for each group of patients. In our opinion patients in group four, Critical Care, needed to have thirty-two per cent of their services provided by the registered nurse group, fifty-seven per cent might have been provided by a licensed practical nurse. Only ten per cent of services required by critical care patients were clearly of a type that aides or orderlies might have provided. It is to be noted that the element of urgency and the need for supervision would suggest a higher proportion of registered nurse participation if some of the services are delegated to other personnel.

Patients in group three, Intensive Service, needed thirteen per cent of their services provided by the registered nurse, sixty-four per cent provided by the licensed practical nurses, and twenty-three per cent by the aide or orderly group. Patients in group two, Standard Care, needed eleven per cent of their services provided by the registered nurses, fifty-eight per cent by the licensed practical nurses, and thirty-one per cent by the aides and orderlies.

Patients in group one, Minimal Care, required only one per cent of their services by registered nurses, seventy-eight per cent by licensed practical nurses, and twenty-one per cent by the aides and orderlies.

It is apparent, as one would expect, in comparing these four groups of patients that there is a marked difference in the distribution of those services which needed to be provided by registered nurses, licensed practical nurses, or aides and orderlies.

It is pertinent to note that patients in group three and two, that is Intensive Service and Standard Care, had need for substantially the same proportion of services supplied by the three categories of personnel. In other words, both Intensive Service and Standard Care patients needed about twelve per cent of services by registered nurses, about sixty per cent by practical nurses, and about twenty-five per cent by aides and orderlies.

TABLE II
Per Cent of Services Rendered By Type of Personnel*

	Type of Personnel			
Level of Care	Registered Nurse	Licensed Practical Nurse	Aide or Orderly	Total
4—Critical Care	32.2	57.4	10.4	100.0
3—Intensive Service	13.2	63.7	23.1	100.0
2—Standard Care	11.1	58.1	30.8	100.0
1—Minimal Care	1.1	77.8	21.1	100.0
All	16.7	59.6	23.7	100.0

These figures pertain only to the medical and surgical services.

Distribution of Services

Table III presents our judgment of the distribution of services provided by the three types of personnel. The division of all services provided by registered nurses is indicated in the second column. Thus fifty-four per cent of the registered nurses' activities were required by the Critical Care patients, fifteen per cent by the Intensive Service patients, thirty-four per cent by the Standard Care patients, and only two-tenths of one per cent by the Minimal Care patients.

Similarly with regard to the licensed practical nurse group, twenty-five per cent of the services of these ladies were required by the Critical Care patients, twenty per cent by the Intensive Service patients, fifty per cent by the Standard Care patients, and four per cent by the Minimal Care patients.

The Critical Care patients required eleven per cent of the activities of the aide and orderly group, Intensive Service patients required eighteen per cent, Standard Care patients sixty-seven per cent, and Minimal Care patients three per cent.

It should be noted that in these tables the basic unit has been the actual services provided; no weight has been given to the difficulty or complications which might be encountered in actually providing the service. It seems reasonable to expect, however, that the Critical Care and Intensive Service groups would require relatively more time than the other two groups.

TABLE III
Per Cent of Services Rendered by Level of Care*

Level of Care	Type of Personnel: Registered Nurse	Licensed Practical Nurse	Aide or Orderly	Services by All Personnel
4—Critical Care	54.4	25.1	11.5	26.1
3—Intensive Service	15.0	20.3	18.5	19.0
2—Standard Care	34.4	50.5	67.2	51.8
1—Minimal Care	0.2	4.1	2.8	3.1
Total	100.0	100.0	100.0	100.0

**These figures pertain only to the medical and surgical services.*

Number of Services

Table IV presents the *mean* number of services provided per patient. This includes services needed for personal maintenance, for diagnosis and therapy, and for other procedures. The mean number of services is presented in terms both of the level of care required by the patient and also of the type of service provided. Patients in the Critical Care category received an average of forty-four personal maintenance services, thirty-six therapy and diagnosis services, and forty-two items of other attention. The average number of services provided per patient was one hundred twenty-one.

Patients in group three, Intensive Service, received an average of forty-six services for personal maintenance, thirteen services for

TABLE IV
Mean Numbers of Service Items Per Patient by Level of Care and Type of Service*

Level of Care	Type of Personnel: Personal Maintenance	Therapy and Diagnosis	Other Attention	Totals
4—Critical Care	43.7	35.7	41.6	121.0
3—Intensive Service	45.9	13.0	16.5	75.4
2—Standard Care	14.2	7.0	10.2	31.4
1—Minimal Care	4.0	5.3	6.2	15.5

**These figures pertain only to the medical and surgical services.*

therapy and diagnosis, and sixteen other services for a total of seventy-five services per patient. Patients in the Standard Care group, level two, received an average of fourteen services for personal maintenance, seven services for therapy and diagnosis, and ten services for other attentions. The average total is thirty-one items per patient. Patients in the Minimal Care group, level one, received an average of four services for personal maintenance, five services for therapy and diagnosis, and six other items of attention. The total here is fifteen services per patient.

Particularly noteworthy is the marked difference in totals between the four groups. Also striking is the fact that while patients in group four, Critical Care, have roughly equal needs for services in the three major categories, patients in both groups three and two, Intensive Service and Standard Care, require many more services for personal maintenance than they do for therapy and diagnosis.

General Conclusions

Several general conclusions appear warranted from the data which have been presented. First, patients on the medical and surgical services can easily be separated into four major categories. Patients in the Minimal Care classification require relatively few services, many of which are for oral medications that the patient might take himself. If a Minimal Care service were available, relatively similar demands would be made by individual patients. These demands could be met with a relatively small staff, the patients could have relatively more freedom to move about the hospital, the patients could do relatively more to help themselves, and the cost of services would be reduced appreciably.

The Standard Care and Intensive Service groups of patients have needs for similar types of services; these two groups differ mainly in that the Intensive Service category requires about two and one-half times as many services as does the Standard Care group. There is a similar distribution of types of services required and also in types of personnel which might provide these services.

The Critical Care group of patients has an average need for four times as many services as does the Standard Care group. In addition to this large requirement for services, the patients have certain other needs in common: there is urgency in meeting their needs, special facilities and skills are often required, and the highest level of competence is necessary in their care. If these patients could be grouped together, the most skillful personnel and specialized equipment could be concentrated to provide the best chance of recovery. There seems to be little doubt, on the basis of experience in other hospitals, that there is a real need for such a facility.

It is reasonable to anticipate that adequate provisions for the Minimal Care group and for the Critical Care group in separate facilities and for the Intensive Service and Standard Care groups together would result in a reasonable and a more homogeneous grouping of patients. Smoothing out or decreasing the varying demands made upon the nursing service should result in an ability to plan staffing more adequately and more efficiently. Not only does it seem reasonable that excellent care would be provided each patient but also that the total operation would be more economical.

With these points in mind, the University Hospital is being designed to provide special facilities for these major groups of patients.

(The author wishes to acknowledge the important contributions made to this study by Prof. H. Bost, Prof. A. Ross, and Shirley Wester.)

Enough, if something from our hands have power
To live, and act, and serve the future hour.
—Wordsworth

A REVIEW OF SUDDEN AND UNEXPLAINED DEATH IN CHILDREN*

ISRAEL DIAMOND, M.D.**
Louisville, Kentucky

SUDDEN death in childhood is by no means a rare occurrence. At the Children's Hospital in Louisville, the problem arises from four to six times a year. In a community of this size, such cases are reported in the press at least a dozen times a year. The term sudden death usually implies death occurring in an ostensibly healthy individual, but will here include unexpected death, thus allowing a consideration of cases with mild illness in whom death came as a shocking surprise. Indeed, intimate investigation of cases of sudden death in the former category usually reveals that the individual has had symptoms of illness. The successful analysis of deaths is important to the community and to the family. The implications are medico-legal and psychological. Every community wants and is entitled to the proper labeling of its deaths as homicide, suicide, accident or death from natural causes. Particularly with children dying unexpectedly from natural causes, there are frequent guilt feelings and recriminations occurring in the family. Explanation based on sound investigation can usually prevent unfortunate circumstances from arising.

Causes

The causes of sudden or unexpected death are almost as great as the body of medicine itself. There are relatively few conditions which cannot, in some individuals, masquerade and pursue an insidious course so that the final episode comes as a surprise. We can, however, list broad categories which recur with some frequency and make for a convenient consideration of etiology. The groups listed are by no means complete and only isolated examples will be given to illustrate some of them.

1. Poisons: The usual case of poisoning is hardly that of sudden or unexpected death. Shortly after the poisoning occurs, there is usually a dramatic symptomatology, the discovery that poison has been taken and the hurried trip to the doctor or hospital emergency room. Even when death occurs, while it most certainly concerns the coroner or medical examiner, it is not altogether unexpected. There are, however, cases in which poisoning is either over-looked or remains undetected until death has occurred. An example is lead poisoning. Many of these children are regarded as well by their parents and the ingestion of paint or plaster is regarded as a childish foible. In some cases, parents have absolutely no knowledge of the child's ingestion of lead-containing substance. Lead poisoning may strike with dramatic suddenness, with or without a convulsion, and the onset of coma progressing to death in a matter of minutes or hours. We recently autopsied a three-year-old girl in good health, who suddenly convulsed, became comatose and died three hours later. The only morphologic findings at autopsy were marked cerebral edema and a few scattered inclusion bodies in the renal tubular epithelium. Chemical analysis, however, revealed over 400 micrograms per cent of lead in the liver.

2. Foreign bodies: The term foreign body covers a lot of territory to be sure. Here we are concerned with ingestion and/or aspiration. A particularly striking example was a two-year-old boy who detached a clear, colorless, plastic hemispherical eye-covering from a large panda doll. He managed to impact this into his oral pharynx with the concave side facing the oral cavity and asphyxiated abruptly. At least two doctors inspected his throat with a flash light and failed to see the impacted object because of its remarkable transparency. It was detected at autopsy only by the palpating finger.

Interpretation of Aspiration

Aspiration of gastric contents presents great difficulty in its interpretation as a cause of death. Many infants and some older children die because of aspiration. In practically every case there is some underlying condition which renders the child ill and more prone to this accident than his healthy counterpart. The presence of underlying disease, however, in no way lessens the importance of the problem since we are discussing children who, except for the aspiration, would be expected to recover. Many of these cases occur in the home and many of the infants who are alleged to have smothered are in fact cases of minor illness coupled with aspiration. It is unfortunately true that cases also occur in hospital. Infants and small children who are sedated but fed b

*Presented to the National Association of Coroners, Louisville, Kentucky, August 22, 1957.

**From the Departments of Pathology, Children's Hospital, Louisville, and the School of Medicine, University of Louisville.

mouth are particularly prone to this accident. Infants suffering from mild respiratory disease or diarrhea along with infants suffering from more serious disease should be kept on the right side or in prone position since the danger of aspiration is so real.

The following case is typical of many. A three-month-old male infant was admitted to the hospital with a two-day story of loose stools and refusal to take more than a very small amount of feeding. On admission, the child was found to be mildly dehydrated and intravenous therapy was instituted. Unfortunately, the child's regular formula administered by bottle and nipple was offered to the child. Six hours after admission the child became cyanotic shortly after taking one suck at the nipple and expired forthwith. Autopsy revealed a solid plugging of the larynx by the formula and a minimal enteritis. Death could have been prevented by with-holding oral feedings or by the use of a naso-gastric tube.

It should be pointed out that in many individuals the diagnosis of death by aspiration is a matter of opinion. It is a conclusion rather than a fact. Numerous individuals aspirate varying amounts of gastric contents in the agonal state and the pathologist must look for positive and negative data to determine the importance of the aspirated material. None of the pathological findings, such as air block, atelectasis, or mucosal reddening is in itself evidence of significant aspiration. As a general rule, however, agonal aspirates are slight in amount, do not occlude the airway and produce no significant changes in the lungs. In common with most morphologic entities, the clinical data, when available, are of paramount importance.

3. Physical agents: Here we may include a variety of traumas, electrocutions, strangulations and pediatric homicides. There is the occasional case of death resulting from trauma with extensive internal injuries, such as laceration of spleen, lungs or aorta some hours after a trauma leaving no external marks. The child is notorious for having a plastic thorax which may sustain sufficient trauma to rip a lung without any rib fractures or, for that matter, even ecchymoses of the chest wall. Electrocution in crawling infants and toddlers is not excessively rare and the proper protection of electrical outlets and the proper grounding of electrical apparatus should concern every parent. Usually the circumstances are self-explanatory but there are occasional cases in which the electrocution is not obvious and the entrance and exit burns may be extremely small and easily overlooked. Unfortunately, children in the age group from five to ten will experiment with ropes and other asphyxial devices. The result is an occasional tragedy in which evidence may or may not be present when the body is viewed. It is possible for death by strangulation to occur rapidly and without leaving marks on the skin.

Suffocation

The older vital statistics and medico-legal literature are filled with cases of infantile suffocation and smothering. Many of these cases are alleged to have suffocated by being trapped in the bed clothes. Others are designated as due to death by over-lying by an adult sleeping in the same bed. A few others are attributed to homicidal smothering using the hand or a pillow. It is interesting and significant that whenever a community has instituted confirmation of cause of death by autopsy, the incidence of these cases has dropped dramatically. The city of Birmingham, England provides us with a good example. From 1916 to 1925, deaths attributed to mechanical suffocation ranged from 22 to 36 cases per year. Since the institution of autopsies in 1925, cases have ranged from 1 to 5 per year. It is, of course, possible to over-lay a child but it is extremely unlikely to occur unless the adult is comatose or in a drunken stupor. Infants can give a surprisingly good account of themselves struggling. It is possible for an infant to become mechanically asphyxiated by a loop of sheeting, or by getting its head through the bars of a crib. This is quite a rare occurrence, however, and infants seem to thrive under layers of sheets and blankets. I have seen one child who was strangled by the aperture of a zippered sleeping bag designed for infants. Homicidal smothering may leave abrasions and scratches. Unfortunately, it is quite possible for a child to be smothered homicidally without leaving marks.

4. The infections comprise the most important and largest group of unexpected deaths. It is probably true that the great majority of cases attributed in the past to over-lying, smothering in the bed clothes, and status thymicolymphaticus were cases of infection. In the infant group the leading offenders are laryngotracheobronchitis and pneumonia. In the older children these are found along with other infections such as myocarditis, meningitis, encephalitis and

peritonitis. The leading infectious agents are hemophilus influenzae, streptococcus, Friedlander's bacillus and meningococcus and viruses including poliomyelitis, Coxsackie and herpes simplex. The following are illustrative cases:

An allegedly well male infant, four months of age, was placed in a perambulator by his mother for the afternoon nap. A little later she discovered the child to be dead. A little vomitus containing milk curds was noticed in the mouth and on the bedding next to the mouth. Autopsy revealed an extensive hemophilus influenzal meningitis. Further questioning revealed that the child had been irritable and fretful for three days prior to death.

An eight-year-old girl complained of mild abdominal pain shortly after the evening meal. Her temperature was normal and the complaint not sufficiently severe to warrant summoning a physician. The child slept comfortably during the night and had breakfast the next morning. She attended Sunday school and returned home for lunch. She had had a little pain during the morning. Her appetite was good and she ate a hearty lunch. Shortly after lunch, she vomited and developed a temperature of 101. A physician was summoned, who arrived 20 minutes later to find the child dead. Autopsy revealed a small acute perforating gastric ulcer on the greater curvature of the body and a fulminant acute peritonitis.

5. Congenital anomalies may occasionally be present with little or no symptomatology until death occurs. Subarachnoid and intraventricular hemorrhage probably fall into this category. Congenital cardiac anomalies form the majority of these cases in childhood, particularly in the infantile group. Some infants with badly damaged hearts may show quite satisfactory progress until a physiological accident such as closure of the ductus arteriosus or some exogenous accident such as a mild respiratory infection causes heart failure and unexpected death. Endocardial fibroelastosis is a notorious offender in this respect. One type of this disease characteristically is associated with a symptom-free course until the final episode occurs with death following in minutes, hours or days. It is curious that this disease may sometimes suddenly kill individuals in their teens.

6. Blood dyscrasias: The leading offender is anemia. The point is illustrated by a four-year-old negro boy alleged to be symptom-free and in good health, who dropped dead while playing with some other children in the back yard. Autopsy revealed a striking fatty degeneration of the heart, an enlarged fatty liver and very marked pallor of the organs. His hemoglobin was 4 gm. %. We are not clear as to the cause of his anemia although it was very likely on a nutritional basis. There can be no question, however, that the anemia led to sudden heart failure on exertion with subsequent death. The role of leukemia as a cause of sudden death is well documented. The same applies to the dyscrasias impairing the coagulation mechanism.

7. Deficiency diseases: Quite a number of deficiency states can be implicated indirectly. Rickets and/or scurvy are well-known causes of sudden death in infancy. The most striking examples that we have seen in the past year were two infants, five and six months of age respectively, allegedly well, who died suddenly. Both infants showed gross edema of the heart consistent in every respect with the so called Beri-Beri heart.

8. Tumors: Tumors can cause sudden death in a variety of ways but the leading example is the brain tumor, usually located in the posterior fossa, producing few or no symptoms. A slight hemorrhage within the tumor precipitates a dramatic change with convulsions, coma and death within a matter of hours.

9. Convulsions: Convulsions are, of course, precipitated by a variety of conditions in susceptible individuals. In some children, the convulsions may cause a cerebral edema sufficient to cause death.

The above by no means exhausts the possibilities. It does, however, provide a compelling reason for adequate and detailed examination of these cases.

Evaluation of Abnormalities

Deaths must be investigated by competent post mortem examination with adequate histological, microscopic, micro-biological and toxicological studies. It has been repeatedly emphasized in the literature dealing with this problem that a great deal of attention must be paid to detail and nothing over-looked. Werne cites a case of an infant dying from laryngeal suppuration evident only on microscopic examination. The circumstances attending the death and a detailed history of events preceding death are of equal importance in the interpretation of the

data. It is significant that, even with optimal investigation by competent people, there will still be cases of unexpected death remaining unexplained.

The pathologist must carefully evaluate any departure from the norm in terms of functional significance and must not yield to the temptation of assigning a lesion as the cause of death merely because it is the only abnormality present. The solution of this problem will be furthered by a frank statement of "I don't know." There is ample clinical and experimental evidence to indicate that death may occur through functional disturbance without morphologic change. Death by inhibition is a well recognized entity. Death from metabolic imbalance, particularly electrolytic imbalance, is equally well recognized. It is important, therefore, that the issues not be obscured by misinterpreting the significance of low grade or minimal pneumonitis, agonal aspirations of gastric contents and agonal congestions, hemorrhages and edema.

This brings us logically to the consideration of status thymicolymphaticus. The subject is usually discussed with more passion than logic and discussion of its role as a cause of death in children usually becomes a debate of whether it exists at all. What are the facts? The facts are: 1. Some children do die after trivial trauma. 2. Some of these children do have a delicate body build, large thymuses and what is described as delicate, thin-walled arteries. I have been unable to find any measurements of thickness of vessel walls recorded. 3. We know that the thymus is an extremely labile organ which responds rapidly to certain stress situations by a marked shrinkage, i.e. hyperinvolution. 4. Tables of normal values for thymic size and weight, illustrating the extreme variability of the organ, are available.

On the basis of these facts, I would maintain that the diagnosis of status thymicolymphaticus should rarely, if ever, be made. I, personally, have never made it and I would prefer, in the absence of other facts, to consider such a death as unexplained rather than to attribute it to such a poorly defined disease concept. If one accepts status thymicolymphaticus as an entity, then one is still in a position of not being able to utilize it as a cause of death. By the same token, one should then, in the absence of other findings, attribute unexpected death in a fat man to obesity or to attribute death in a hairy individual to hirsutism. It should also be stated that large thymus glands within the normal range do not asphyxiate their owners. A benign thymoma, weighing approximately three pounds, was removed from a five-year-old girl at the Children's Hospital. She gave a history of stridor and stertor since birth and there was radiologic evidence that she had an extremely large thymus at birth.

Here was a rare individual who actually had respiratory embarrassment because of a large thymus. Her thymus increased in size sufficient to push her sternum markedly forward, yet asphyxia did not occur. The case cited by no means establishes that a large thymus cannot cause asphyxia but it does illustrate that such an occurrence must be excessively rare. In a death attributed to thymic asphyxia, it would be necessary to establish that there was not an associated congenital abnormality of the tracheal cartilages.

Summary

Sudden and unexpected death in infancy and childhood is a tragedy that requires meticulous investigation for proper explanation. Both society and the family benefit by the correct answer. The answer will be obtained only through full autopsy investigation in which ill-founded notions and old wives tales have no place. And finally, some deaths despite our best efforts, must remain unexplained in our present state of knowledge.

Harmony of aim, not identity of conclusion, is the secret of the sympathetic life. —*Emerson*

PAROXYSMAL VENTRICULAR TACHYCARDIA-FLUTTER*
Report of a Case Controlled with Atropine

ERNEST W. AKINS, JR., M.D.**
AND
LESLIE H. LAYMAN, M.D.***
Louisville, Kentucky

PAROXYSMAL ventricular tachycardia is a relatively infrequent arrhythmia which was first well-described by Sir Thomas Lewis in 1909.[1] Its recognition can many times be made clinically and nearly always electrocardiographically if sufficient leads are taken. The electrocardiographic criteria for the diagnosis have been given as follows:[2] "The beats of the paroxysms must be ectopic in origin and must conform to those observed as isolated ventricular extrasystoles before the onset of the paroxysm; the complexes should be widened and notched; the first beat of the paroxysm should bear the same relation to the preceding normal beat as a coupled extrasystole bears to the preceding normal beat; the ventricles are observed beating regularly at a rate of 130-180 per minute; the auricles also beat regularly, slower than, and entirely independently of the ventricles.

Three types of ventricular tachycardia have been described: (1) Runs of ventricular extrasystoles all of which have the same configuration with a rate ranging from 130-180 per minute. (2) A bidirectional type which is usually the result of toxic digitalis effects, and which is possibly of nodal origin. (3) A type seen immediately preceding, or upon emergence from Stokes-Adams seizures, which consists of markedly aberrant and widened QRS complexes at a rate of 200-250 per minute." This latter type has been referred to as "ventricular flutter"[2] and is the type of arrhythmia presented in the following case report. This case was of unusual interest in that it failed to respond to moderate doses of procaine amide but was apparently terminated on two occasions with the use of atropine sulfate.

Case Report

The patient, a 79-year-old white male retired farmer, was in fairly good health until December 1955 when he was hospitalized at another hospital for hemoptysis and pneumonia. He was considered to have had an infarction in the left lung and during this hospitalization had a slow auricular fibrillation. For the two weeks prior to hospitalization at the Veterans Administration Hospital, Louisville, Ky., he was at home and continued to have intermittent hemoptysis and severe weakness. He was admitted January 22, 1956, for these symptoms. He had been told since 1907 that he had a bad heart, that it was enlarged, that he had murmurs, and that there was an irregular beat. He had taken digitalis for many years but ceased several years ago. He had also been told that he had high blood pressure. The review of systems revealed that he had suffered a 20 pound weight loss in the previous two months, dyspnea on exertion for ten years which was apparently stationary, and the recent bout of hemoptysis and weakness without significant chest pain. There was no history of orthopnea, ankle edema, or angina. It was impossible to ascertain the beginning of his irregular heart rhythm.

Physical examination revealed a temperature of 99°; an apical pulse rate of 150 per minute, a radial pulse rate of 110 per minute, respirations of 20 per minute, and blood pressure of 160/100. He was a well developed, well nourished, white male, appearing both acutely and chronically ill. He was a poor historian, who appeared lethargic and was in mild respiratory distress. The neck veins were prominent. The funduscopic examination revealed a Grade II, Keith-Wagner retinopathy. There was elevation and immobility of the left hemi-diaphragm with consolidation of the left lower lobe posteriorly and fine inspiratory rales in the left lower pos-

*From the Medical Service, Veterans Administration Hospital, Louisville, Ky., and the Department of Medicine, University of Louisville School of Medicine.
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**Formerly, Resident in Medicine, V. A. Hospital, Louisville, Ky.
***Chief of Cardiology Section, V. A. Hospital, and Assistant Professor of Medicine, University of Louisville School of Medicine.

terior chest. The apex beat was seen in the sixth intercostal space just outside the mid-clavicular line and the heart was enlarged to the left anterior axillary line. There was a grossly irregular rhythm and a Grade II soft apical systolic murmur. There was no hepatomegaly, ascites or ankle edema.

Laboratory: Initial hemogram and urinalysis were normal; serum sodium, 144 mEq/liter; potassium, 4.9 mEq/liter; bicarbonate, 24 mEq/liter; chloride, 104 mEq/liter. Albumin was 3.3 and globulin 3.5 gm. %. The BUN on 2/3/56 was 14 mg. % and the serum potassium 5.24 mEq/liter. Prothrombin times from 1/25/56 to 3/14/56 were generally within therapeutic limits while on Hedulin® anticoagulation. X-rays of the chest initially revealed a diffuse density in the left lung base and left ventricular enlargement, and on the 6th hospital day revealed changes consistent with a small infarct in the right lower lobe. By 2/14/56 the densities in the left lower lobe and right lower lobe had begun resolving on x-ray, and by 4/4/56 showed almost complete resolution.

Hospital Progress: The patient remained afebrile throughout his entire hospital stay and

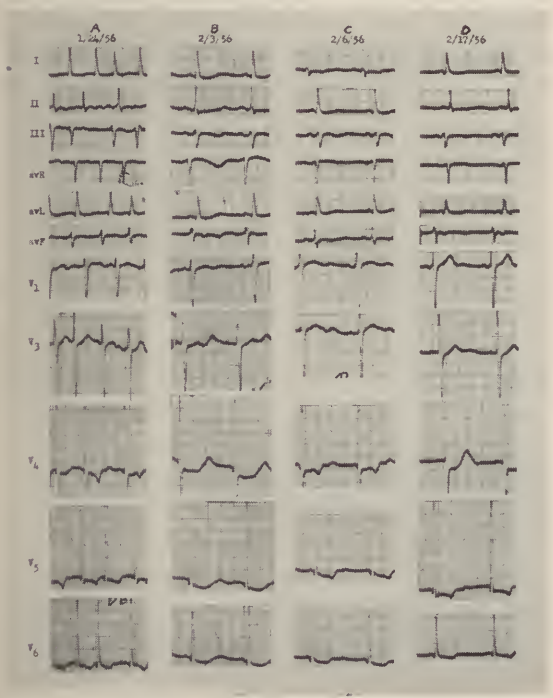


Figure 1

(A) 1/24/56—showing auricular fibrillation.
(B) 2/3/56—prior to the onset of the ventricular tachycardia-flutter episodes. A reversion to sinus rhythm is noted and a prolonged Q-T interval thought to be due to quinidine effect. Serum potassium was 5.24 mEq/liter.
(C) 2/6/56—after the ventricular arrhythmia episodes.
(D) 2/17/56—shows probable left ventricular hypertrophy.

his blood pressure averaged 170/86. He was initially treated for the pulmonary infarctions with Hedulin and penicillin. He was digitalized with oral digitoxin with the subsequent lowering of his apical rate to 80 beats per minute following which on 1/31/56 the digitoxin was discontinued. On 1/31/56 he was given 3 gr. of quinidine sulfate orally every four hours for 4 doses following which there was a reversion of the auricular fibrillation to normal sinus rhythm. (See Fig. 1.) He was maintained on quinidine gr. 3 every four hours until 10 AM on 2/3/56 after which he received no more quinidine. At 10 AM on 2/3/56 the patient suddenly became unconscious and apneic for 30 seconds, during which time no pulse could be detected by the nurse and when the pulse returned there was a bigeminy and complete return of consciousness. The EKG showed sinus rhythm with frequent premature ventricular contractions and the patient was given atropine sulfate grains 1/100 intramuscularly. He had no further Stokes-Adams attacks until 4:45 PM when he had another similar episode. During the following four hours, the patient was observed continuously. An EKG was taken much of the time with various leads, primarily V_1 where the P waves could be most easily distinguished. (See Fig. 2.) He would have a Stokes-Adams attack accompanying most of the episodes of ventricular arrhythmia as follows: He would become nauseated and start coughing when the EKG showed only a bigeminy due to premature ventricular contractions.

Soon after the ventricular tachycardia pattern was observed, he would become apneic and rigid and then progress into ventricular flutter and, on occasions, into short runs of ventricular fibrillation. There were no focal seizures. Following a short interval after the subsidence of the ventricular arrhythmia he would regain complete consciousness and appear normal, and during this interval the EKG would reveal low, middle, and upper nodal rhythm which would gradually revert to sinus rhythm. He did not have a complete heart block. Initially he was given 1.0 gm. procaine amide intravenously without clinical or EKG effect. When he continued to have Stokes-Adams attacks, he was given another 0.5 gm. intravenously and 0.5 gm. intramuscularly of procaine amide without effect, and thereafter was given 0.5 gm. intramuscularly every 4 hours until noon of 2/4/56 at which time he was given grains 1/150 of

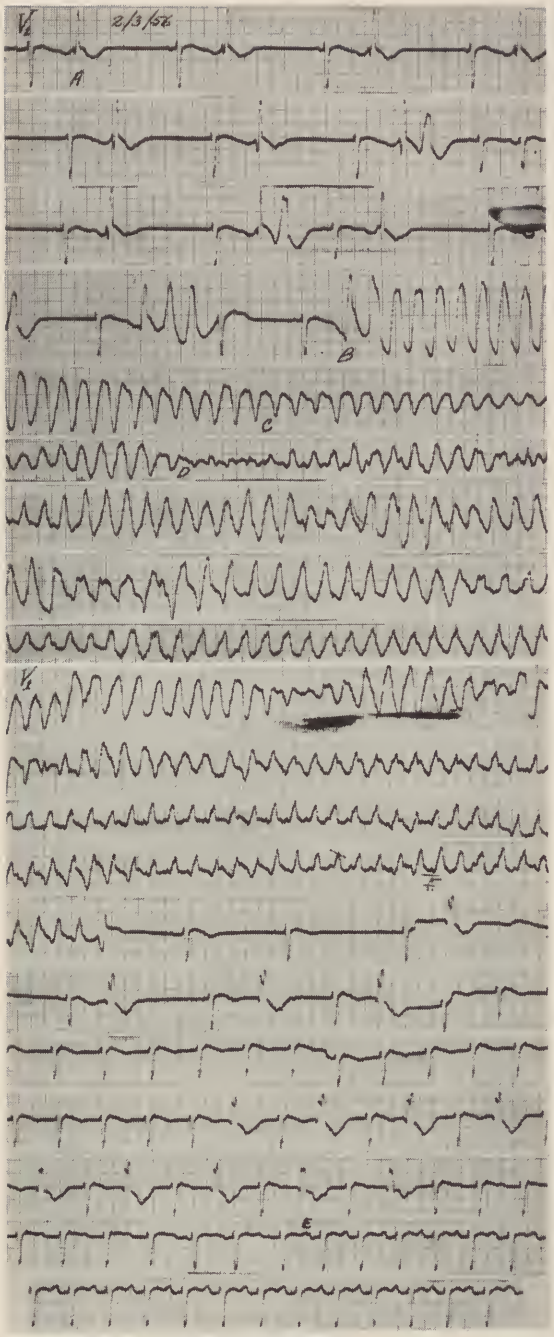


Figure 2

A continuous tracing of lead V_1 taken at 7 pm 2/3/56.

(A) Sinus rhythm with a bigeminy due to ventricular premature systoles, gradually increasing in number.

(B) Onset of ventricular tachycardia.

(C) Ventricular flutter concurrent with Stokes-Adams attack.

(D) Ventricular fibrillation. The ventricular arrhythmia was 76 seconds in duration with the patient apneic and rigid during the entire episode.

(E) Shows resumption of sinus rhythm with a first degree A-V block.

atropine intramuscularly and the patient had no further attacks. During this 16 hour period, the patient had more than 20 observed episodes of Stokes-Adams seizures and received a total of 4.5 gm. procaine amide without effect.

After control of the ventricular arrhythmia, the patient was maintained on atropine gr. 1/150 every 4 hours intramuscularly and procaine amide 0.5 gm. every 6 hours intramuscularly. The procaine amide was gradually reduced and withdrawn by 2/13/56 and then the atropine was gradually reduced and withdrawn on April 3, 1956. The patient gradually recovered from his pulmonary infarctions and had no further cardiac problems. Subsequent EKG's showed no appreciable changes of his basic pattern or his sinus rhythm. (See Fig. 1.)

The final impression was arteriosclerotic heart disease with left ventricular hypertrophy, myocardial ischemia and paroxysmal ventricular tachycardia-flutter, and multiple pulmonary infarctions.

Review of Pertinent Literature

Approximately 90% of the cases of ventricular tachycardia occur in the presence of organic heart disease.[3, 4, 5, 6] Myers[7] states that myocardial infarction is the most common cause of ventricular tachycardia. Digitalis preparations have been said[5] to cause up to 25% of the cases, even with as small a dose as 0.6 mg. oral digitoxin.[8] In approximately 10% of the cases of ventricular tachycardia, no organic heart disease is found.[5] Peters[9] reported a case in an otherwise normal heart in which paroxysmal ventricular tachycardia (PVT) occurred upon assuming the upright position and was terminated by lying down. This situation was abolished by ergotamine tartrate and they assumed that the etiology was "nervous system imbalance." Dunn et al.,[10] reviewed the literature and found eight cases of PVT associated with the Wolf-Parkinson-White syndrome and added two cases of their own in which the PVT was controlled with quinidine and procaine amide. Scott et al.,[11] were able to induce PVT, flutter-fibrillation, and Stokes-Adams attacks by rectal stimulation in a patient with complete heart block. Bruce[12] and Jordan[13] reported cases of PVT following the two-step exercise test. Diamondstone[14] reported a case of ventricular tachycardia after overdosage with quinine given as self-medication for malaria. Other cases of PVT have been reported due to potassium intoxication,[15] emotion,[16] and cyclopropane anesthesia.[17]

Quinidine and procaine amide are the drugs of choice in the treatment of paroxysmal ventricular tachycardia.[2,18] Procaine amide is given

0.5 gm. orally or intramuscularly every 2-4 hours. When given intravenously under EKG control it is used at the rate of 100 mg. every two or three minutes until sinus rhythm is restored, or until one gram is given or toxic effects are noted. Lovelace[19] emphasized that sometimes larger than usual doses of procaine amide must be given. He progressed up to 1500 mg. at 400 mg. per minute to revert a case of ventricular tachycardia to nodal rhythm after the usual smaller dose was ineffective. Denny[20] emphasized that procaine amide in usual dosages, like quinidine, may cause ventricular fibrillation. Berry [21] noted that a number of fatalities had been reported following the use of procaine amide, but since the patients were usually in extremis prior to treatment, he felt that evaluation could not be accurate. Ventricular tachycardia has been converted with quinidine after procaine amide failure[22] and procaine amide has successfully terminated quinidine induced ventricular flutter.[23] Other drugs have occasionally been successful. Gilson and Schemm[24] demonstrated that ventricular tachycardia can be occasionally controlled with digitalis therapy. Boyd[25] was able to convert one of two cases of PVT with 20 cc. of 10% magnesium sulfate. Sabathie[26] was able to control the arrhythmia in 9 out of 10 patients with morphine sulfate intravenously. Stempier[27] was able to abolish PVT in a case with potassium chloride after quinidine, digitalis, magnesium sulfate, and atropine had failed. Samia[28] was able to convert a case of ventricular tachycardia with 1.5 gm. Atabrine® orally after large doses of quinidine and procaine amide had failed, and suggested that Atabrine, like quinidine, paralyzes the vagus. Dupler[29] in a case very similar to the present one gave large doses of quinidine to a patient with Stokes-Adams attacks due to ventricular tachycardia-flutter-fibrillation without heart block without result. Ephedrine sulfate abolished the attacks. Bisteni[30] demonstrated that Nupercaine® and phenobarbital were a safe, highly effective combination for the treatment of ventricular tachycardia accompanying myocardial infarction in dogs.

Atropine has been suggested for use in ventricular tachycardia.[2,31,32] Wilburne et al.,[33] were able in 6 out of 7 dogs to inhibit epinephrine induced ventricular tachycardia with the prophylactic use of 1.3 mg. atropine. LeRoy et al.[34] were able to lower the mortality rate after experimental coronary occlusion from 70% to 34% with the use of atropine prophylactically. They believed this due to the atropine effect on coronary vasodilitation, the prevention of vagal vasoconstriction reflexes and the prevention of ventricular fibrillation.

The effect that atropine exerts on ventricular tachycardia is not clear. Nalefski[35] noted that the only action of atropine on the normal cardiovascular system was an increase in the heart rate and some small changes in blood pressure. Lewis[36] observed a rise in ventricular rate in a patient with complete heart block after being given atropine. Gilchrist[37] concluded that atropine, in vagal paralyzing doses, produced an acceleration of the ventricular rate in cases of complete heart block and that the amount of the response was determined by the inherent rhythmicity of the specialized tissue at the center of impulse formation. Peterson[38] suggested that certain vagal fibers do affect the ventricles directly and Wilson[39] reported a case in which the vagus influenced the form of the ventricular complex. Salley[40] concluded that atropine may have had a direct action upon the ventricles following the stoppage of ventricular tachycardia with atropine in a patient with coronary thrombosis. This interesting patient was given 0.002 gm. atropine subcutaneously and seven minutes later complete heart block was uncovered. He was also given large doses of quinidine. However, the patient redeveloped ventricular tachycardia 27 hours later, did not respond to atropine and quinidine, and subsequently died.

Wilburne et al.[33] reasoned that the action of atropine in their case permitted the sinus node to discharge at a rate more rapid than that of the ventricular focus, thereby regaining its pacemaker function or that atropine also operated on the acetylcholine esterase system to prevent reflex cholinergic actions of epinephrine. They concluded that atropine had beneficial results in lowering the mortality in experimental coronary artery ligation by preventing ventricular tachycardia and terminal ventricular fibrillation.

Allen et al.,[41] however, found that bilateral vagotomy did not abolish ventricular tachycardia induced by cyclopropane anesthesia in 15 out of 19 cats, and that in eight cats, atropine subcutaneously failed to prevent the arrhythmia.

Field[42] reported a case in which direct faradic stimulation of both vagi produced slowing of the ventricular tachycardia.

Schwartz et al.[43] in studying the effect of 1/30 grain atropine on three patients with transient seizures of ventricular fibrillation and established A-V dissociation, concluded that the effect of atropine was a transitory slowing followed by a transitory acceleration of the idioventricular rate, the disappearance of spontaneously developing premature beats of the ventricles, changes in the site of the idioventricular pacemaker, and disappearance of RS-T segment and T wave changes from negative to positive deflections. This action left no doubt in their minds that the idioventricular pacemaker was at all times under the influence of the vagus nerves or the carotid sinus mechanism. They were able to avoid the onset of the transient seizures of ventricular fibrillation in one patient with the use of atropine.

The EKG patterns during Stokes-Adams seizures have been recently redefined by Pastor and Worrilow.[45] They reviewed the work of Parkinson et al,[44] who had stated that of their 64 cases of Adams-Stokes syndrome, 18 had combinations of ventricular arrhythmias and ventricular standstill, 13 had ventricular tachycardia and ventricular fibrillation without standstill, and 33 had ventricular standstill alone. They reemphasized that ventricular tachycardia, ventricular fibrillation or ventricular asystole, or any combination of the three may occur during the Stokes-Adams attack.

In 1925, Sir Thomas Lewis[46] stated that ventricular arrhythmias occurred, as in the auricles, ranging from flutter through impure flutter to fibrillation, and believed them to be caused by the circus movement. Scherf et al.[47] believed that ventricular flutter was due to a local tachysystolic focus. The ensuing bombardment of rapid stimuli induced the formation of innumerable tachysystolic centers in all parts of the ventricular myocardium which is seen as ventricular fibrillation.

Summary

A case of paroxysmal ventricular tachycardia-flutter treated successfully with atropine is presented and the pertinent literature reviewed.

The reported case had arteriosclerotic heart disease and developed pulmonary infarctions. Later, he had multiple Stokes-Adams attacks due to paroxysmal ventricular tachycardia, flutter, and on occasion, ventricular fibrillation. He did not respond to procaine amide but responded on two occasions to atropine. The arrhythmia in this case may have been caused reflexly by the pulmonary infarctions.

It is postulated that, in certain instances, ventricular arrhythmias may be reflexly induced through the vagus nerve and in these instances, atropine, through its vagal blocking effect, can be used to terminate them.

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SOME ASPECTS OF LOWER URINARY TRACT DISEASE IN THE FEMALE

JOHN J. ROBBINS, M.D.
Louisville, Kentucky

CYSTITIS is one of the most common affections of the female of our species. It was estimated in 1955 that there were five million new cases of cystitis present in the United States. This is of special interest when one realizes that the presence of cystitis in the male is of uncommon occurrence and deliberate attempts to infect a normal bladder will invariably fail. Numerous investigators have instilled pure cultures of Escherichia Coli directly into animal bladders only to obtain sterile urine cultures within 48 hours. From this knowledge is derived the axiom that the bladder is never primarily infected. This axiom may not hold true when there is a previous bladder damage as in radiation cystitis and interstitial cystitis or Hunner's ulcer.

Routes of Infection

The routes of infection of the bladder are well known and include: 1. Descending infection from a focus of infection in the kidney such as tuberculosis or chronic pyelonephritis; 2. Ascending infection from the diseased urethra and; 3. Infection along the lymphatics draining the cervix of the uterus and the anterior vaginal wall. These lymphatics course upward directly beneath the trigone of the bladder and account for many of the cases of chronic granular trigonitis seen in patients with chronic cervicitis and chronic vaginitis. Since primary uncomplicated cystitis is rare this entity then poses a diagnostic as well as a therapeutic problem for no therapeutic agent can be permanently effective if the focus of infection is not removed or adequate drainage is not established. Certainly there is no unhappier group of patients than those females who present themselves with the third or fourth episode of acute cystitis in as many months.

Symptomatology

The symptoms of cystitis are those which may be expected. Micturition is frequent and almost always associated with nocturia. Extreme urgency of voiding, indicating an irritable bladder muscle, sometimes actually progresses to the extent of involuntary voiding. A prominent symptom is dysuria, with the pain radiating to the suprapubic area and described as a sense of pressure or cramping, or with the pain referred along the urethra and described as cutting or stinging pain and usually worse at the end of micturition. Gross hematuria is common and is usually at the end of urination, but hematuria may be present throughout urination and may be of considerable severity and associated with passage of clots and considerable blood loss. Patients with acute inflammation of the trigonal area may also describe a ureteral radiation of their pain, indicating extreme spasticity at the ureterovesical junction with relative obstruction to the upper tract. Fever is the exception rather than the rule unless there is involvement of the upper urinary tract. When present it is usually of a constant low grade nature rather than the typically spiking fever of pyelonephritis.

Etiological Factors

The importance of identification of the organisms involved has increased with the advent of the sulfonamides and the numerous broad spectrum antibiotics. In every case of recurrent cystitis catheterized urine culture and sensitivity studies should be done. A simple regimen is to obtain the urine culture at the time of the patient's first visit, then initiate therapy with a sulfonamide, preferably a soluble form such as Gantrisin® or Thiosulfil,® as these drugs will control approximately 80 to 85% of all bladder infections. At the end of 48 hours the culture and sensitivity studies should be available and if adequate patient response has not been obtained, the medication can be changed to a more specific (but also more expensive) antibiotic as indicated by the sensitivity test. Most of us have seen patients whose only complaints were referable to an irritable bladder, but

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New authoritative studies show that KYNEX dosage can be reduced even further than that recommended earlier.[1] Now, clinical evidence has established that a single (0.5 Gm.) tablet maintains therapeutic blood levels extending beyond 24 hours. Still more proof that KYNEX stands alone in sulfa performance—

- Lowest Oral Dose In Sulfa History—0.5 Gm. (1 tablet) daily in the usual patient for maintenance of therapeutic blood levels
- Higher Solubility—effective blood concentrations within an hour or two
- Effective Antibacterial Range—exceptional effectiveness in urinary tract infections
- Convenience—the low dose of 0.5 Gm. (1 tablet) per day offers optimum convenience and acceptance to patients

1. Nichols, R. L. and Finland, M.: *J. Clin. Med.* 49:410, 1957.



NEW DOSAGE. The recommended adult dose is 1 Gm. (2 tablets or 4 teaspoonfuls of syrup) the first day, followed by 0.5 Gm. (1 tablet or 2 teaspoonfuls of syrup) every day thereafter, or 1 Gm. every other day for mild to moderate infections. In severe infections where prompt, high blood levels are indicated, the initial dose should be 2 Gm. followed by 0.5 Gm. every 24 hours. Dosage in children, according to weight; i.e., a 40 lb. child should receive ¼ of the adult dosage. It is recommended that these dosages not be exceeded.

TABLETS: Each tablet contains 0.5 Gm. (7½ grains) of sulfamethoxypyridazine. Bottles of 24 and 100 tablets.

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LEDERLE LABORATORIES DIVISION, AMERICAN CYANAMID COMPANY, PEARL RIVER, NEW YORK
*Reg. U. S. Pat. Off.

whose primary disease was chronic pyelonephritis caused by E. coli or Aerobacter aerogenes or tuberculosis. However, most cases of bladder infection can be ascribed to primary urethral disease.

The Urethra

Various factors contribute to the importance of the urethra. First it lies in an exposed position. The external meatus, situated on the vestibule in a trough between the labia minora, is so placed that it is constantly bathed by vaginal, uterine and rectal discharges. It is also exposed to trauma and venereal disease during coitus. It may suffer injury during labor and gynecological operations. Furthermore, it is only about 4 to 5 cm. long, is straight and widely patulous. For these reasons the urethra offers a wide portal of entry to all of the infectious processes. The anatomy of the urethra also makes infection easy.

Urethral Disease

The urethra is not a simple straight tube serving to empty the bladder. There are approximately 20 para urethral ducts or glands in the adult female urethra. Embryologically the entire female urethra is homologous with the posterior urethra in the male. In the male the embryonic ducts along the posterior urethra develop into the prostate gland. In the female, though most of the ducts atrophy and disappear, some persist into adult life.

In chronic urethritis the inflammation is seated deep within the paraurethral glands. Their presence and the presence of infection may be determined when upon examination of the urethra, stripping down of the anterior vaginal wall produces a tiny drop of pus at the urethral meatus. Chronic infection of the paraurethral glands produces infiltration and thickening of the urethral wall and constriction of its lumen. This may be enhanced by the trauma of childbirth or by other mechanical trauma. The effects of this trauma and infection may not be evident for years. These patients may go along with some dysuria, frequency and occasionally mild attacks of cystitis for many years until finally the urethra completely closes and urinary retention ensues. The stricture may be at any point within the urethra, but generally it involves the urethral meatus and the external portion of the urethra. The treatment of this condition of course is dilatation of the urethra and concomitant chemotherapy. Congenital strictures of the female urethra generally involve the urethral meatus. Occasionally, however, one sees the adult female whose urethra is stenotic in its entire length. Not infrequently such congenital constrictions are accompanied by similar narrowing of the caliber of the ureters.

Urethral prolapse is a condition which is entirely peculiar to women and is characterized by a rolling out of the urethral mucosa through the external meatus. When the prolapse is extensive the picture is quite startling. The space between the labia minora may be filled by the prominent purplish red mass which makes one think of a large gangrenous carcinoma. It is usually soft and bleeds quite easily and is extremely sensitive to touch. The treatment is surgical of course. As a rule an indwelling bladder catheter should be used for several days postoperatively because voiding may be painful and postoperative catheterization if difficult is apt to interfere with exact wound healing.

Urethral caruncle is again a condition peculiar to women and actually is a protrusion of the urethral mucosa in form of a polyp. These are usually clinically asymptomatic. They are rarely malignant, but may become infected and are extremely prone to bleed. Because of the possibility of malignancy all caruncles that are removed should be examined microscopically. More frequently, however, they undergo degenerative changes such as ulceration and chronic infection because of trauma to them. If caruncles are removed with the electric cautery, follow-up examinations with periodic urethral dilatations are definitely in order to prevent postoperative stricture.

One commonly missed entity responsible for cystitis is urethral diverticulum. At one time this was supposed to be a very rare lesion, but, the physician who looks for diverticulae by stripping down the urethra will occasionally find them. These are not to be confused with Skene's gland abscesses which are much more common and which usually have their orifice at the external meatus. Diverticulae may be either congenital, inflammatory or traumatic. When they are found in young girls who have had no history of urinary infection the possibility of their being congenital is very strong. In such cases they probably develop from the paraurethral ducts by occlusion of the orifice of the duct. Unless diverticulae are large they are usually symptomless until they become infected

and form chronic indurated abscesses. The outstanding symptoms of these are recurrent frequency, dysuria, pain, urgency and lastly dyspareunia which is an almost ubiquitous symptom in this condition. The mechanism of formation of an inflammatory diverticulum is the same as the congenital one in that the chronically thickened urethral wall occludes one of the paraurethral ducts which then harbors its infected contents until it is surgically excised.

Cystocele

The last clinical entity which we shall mention as being responsible for recurrent cystitis is cystocele. If significant injury occurs during labor so that the bladder supports are weakened, the bladder and anterior vaginal wall may progressively herniate into the vaginal cavity so that eventually the base of the bladder, trigone and the urethra are prolapsed completely into or outside of the vaginal orifice. This interferes with the normal mechanics of bladder emptying thus producing ptosis and residual urine within the bladder. This of course opens the way for the usual sequelae of cystitis and its complications. Therapy in this case is clear. The basic pathology having been corrected the urological sequelae will take care of themselves.

Summary

Some of the sources of recurrent bladder infections have been pointed out. These include the kidney, the cervix and the vagina. For a variety of reasons, the urethra is the source in the majority of cases.

Only by complete evaluation of the patient's pelvis, with careful attention to the anterior vaginal wall and urethra, can the specific process be observed. Once the diagnosis is made then treatment is usually specific.

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CASE DISCUSSIONS

From The

University of Louisville Hospitals



A CASE OF OBSTRUCTIVE PNEUMONIA

LOUISVILLE GENERAL HOSPITAL

E. W., a 49-year-old colored male, was first seen in the Emergency Room of the Louisville General Hospital about six months prior to his initial ward admission. The Emergency Room Report states that the patient complained of "left chest pain." The only abnormal findings were a temperature of 99.6°F and bilateral clubbing of the fingers. The report further states that he was treated with aspirin and referred to the Medical Clinic for study. Apparently this appointment was disregarded by the patient.

On May 7, the patient again presented to the Emergency Room and on this occasion was sufficiently ill to warrant admission to the Medical Ward. The following history was obtained from the patient who was alert, intelligent and a good historian. He considered himself to be in good health until the onset of malaise, coryza and severe frontal headache on May 5. The next day, following self medication with aspirin, the upper respiratory symptoms markedly improved, but a severe cough productive of yellow sputum in copious amounts was accompanied by paroxysms of left chest pain. On the day of admission, the patient continued to produce large amounts of yellow sputum and felt quite ill. His employer checked his temperature, found it to be elevated and brought him to the hospital.

Family history revealed the patient's mother to be alive and well at the age of 65. His father died at the age of 50 of a gunshot wound. There were no siblings. There was no known family history of tuberculosis or cancer. The patient was married, without living children.

The patient had the common childhood diseases, including whooping cough, without known sequela. He had never been under a physician's care since reaching adulthood. He was employed steadily by various restaurants in Louisville as a porter or parking lot attendant. He had always been slight in stature with a maximum weight of 140 pounds. He had continued to use liberal quantities of alcohol and tobacco (cigarettes) since age of 12 years. The patient was a life-long resident of Jefferson County, Kentucky.

On physical examination the temperature was 101.6°F, respiration 24/minute and pulse 90/minute. The patient appeared to be acutely ill, but was well oriented. The skin was hot and moist and without eruptions. There was no palpable lymphadenopathy. The nose, mouth, throat, ears, and eyes were normal. The thyroid gland was not palpable and the neck was supple. There was no venous distension. There was dullness to percussion, with increased tactile fremitus over the upper lobe of the left lung. Many crepitant rales were heard in this area, especially upon inspiration. The heart was normal, except for tachycardia. The blood pressure was 130 mm. Hg. systolic and 70 mm. Hg. diastolic. Examination of the abdomen, genitalia, rectum and extremities revealed them to be within normal limits, except for clubbing of the fingers. The neurological examination revealed no abnormalities.

Laboratory examination revealed a normal urinalysis. The hemoglobin was 16.6 gms./100 ml. and the white blood cells were 10,500 cm. mm. with a differential count of 66% polymorphonuclear, 27% lymphocytes, 3% monocytes and 4% eosinphils. The hemocrit was 48% and the sedimentation rate was 6 mm per hour. The serum non protein nitrogen, chloride and CO_2 content determinations were within normal limits. The serological test for syphilis was negative.

Bacteriological cultures of the sputum were positive for Alpha hemolytic streptococcus on two occasions. Two blood cultures grew no organisms. Cultures for acid fast organisms were not done.

A chest X-ray was interpreted as left upper lobe pneumonia with the remainder of the lung tissue normal. (Figure 1).

The patient responded rapidly to aqueous



Figure 1

penicillin 600,000 units every 4 hours for 3 days, in that the temperature returned to normal and the symptoms disappeared. He was discharged to the Medical Clinic for follow up studies which were to include a chest X-ray. One week later he was discharged from this Clinic because he was asymptomatic and there were no abnormalities on physical examination.

On August 15, the patient returned to the hospital because of hemoptysis, chills and fever. The present acute episode started 12 days prior to admission when following prolonged exposure to ethyl alcohol and river water, he suddenly developed a cough productive of yellow sputum. On the day of admission, he noted chills and fever with bright red streaked sputum. The patient had gained eight pounds in the last six months. The physical examination revealed a temperature of 101.6°F, pulse 96/minute and respiration 18/minute. Once again the left chest was dull to percussion with increased tactile fremitus over the upper lobe. Inspiratory crepitant rales were heard over this area. Clubbing of the fingers was again noted. The remainder of the physical examination was within normal limits.

The extensive laboratory studies may be summarized as follows:

1. Blood count,
   Hemoglobin 13.8—15.7 gms./100 ml.,
   W.B.C. 10,200—18,600/cm mm.,
   % Polymorphonuclear cells 76-80,
   % Eosinophils 2-8
2. Urinalysis—normal X5
3. Blood cultures—negative X5
4. Sputum culture—alpha streptococcus X3
5. Acid fast stain of sputum—negative X7
6. Acid fast stain of bronchial washings—negative
7. Sputum and bronchial secretions were negative for malignant cells X3
8. Skin test for tuberculosis was positive in 1: 1000 dilutions

X-ray of the chest revealed no appreciable change since May 6.

The patient was again treated with antibiotics and the temperature returned to normal on the seventh day after admission. His symptoms again disappeared and he felt well. Bronchoscopy was performed. The trachea and carina were normal. There were no intrinsic masses or abnormal fixations of either main bronchus. The left bronchus was thought to be somewhat compressed extrinsically. No biopsy was taken.

In view of the clinical impression that this case represented obstructive pneumonia secondary to malignant or inflammatory stenosis of a bronchus, the patient was subjected to thoracotomy. In the hilar region of the left upper lobe in the anterior segment, there was found to be a hard, firm, irregular mass measuring 3 to 4 cm. in diameter which appeared to be arising from a bronchus. The tumor mass involved the peripheral pulmonary vein and pulmonary artery. A left pneumonectomy was performed. The surgical specimen was reported as epidermoid carcinoma of the bronchus. In the opinion of the surgeons, this was considered to be a potentially curative resection.

Discussion

Grover Sanders, M. D., Instructor of Medicine

Delayed resolution of a pneumonia is usually considered to have occurred when X-ray evidence of healing is not complete within a period of three weeks. In general, delayed resolution of pulmonary infection occurs secondary to impairment of bronchial drainage. Often an apparent response to antibiotic therapy delays investigative procedures necessary to arrive at a diagnosis. Among the inflammatory condition of the lung leading to delayed resolution would be included aspiration pneumonia with lung abcess formation, Friedlanders pneumonia, primary lung abscess, or empyema. The most

common etiology in a male patient with a history of chronic excessive cigarette smoking is primary carcinoma of the lung with an obstructive pneumonia.

It should be emphasized that carcinoma of the lung usually presents with symptoms caused by bronchial occlusion. Thus, the findings may be suggestive of benign disease and the patient may be quite responsive to antibiotics in that temperature may return to normal, the majority of physical findings and symptoms disappear temporarily. Carcinoma of the lung should not remain undetected for a period of at least six months as occurred in this patient, in view of the efficiency of present day diagnostic procedures available, including, bronchoscopy, X-ray examination, scalene node biopsy, and pathological studies of secretions for malignant cells.

QUESTION: Why did you consider the diagnosis of tuberculosis or fungus infection unlikely?

The acute onset, the presence of purulent sputum, and the failure to demonstrate acid fast bacilli or fungi are in my opinion sufficient to exclude uncomplicated tuberculosis and fungus infection.

QUESTION: Alpha streptococcus were found on numerous occasions. Is this sufficient to establish a diagnosis of streptococcal pneumonia?

Streptococcal pneumonia was considered in view of the repeated findings of alpha streptococcus in the sputum. Streptococcal pneumonia is usually secondary to a viral respiratory infection and is characteristically diffuse, rather than lobar in its distribution. Early invasion of the pleural space and abscess formation are to be expected. The causative organism is a beta-hemolytic streptococcus rather than one producing alpha hemolysis. Since the streptococcus is commonly found in the sputum in normal individuals, the positive sputum culture for the organism is certainly not diagnostic. In streptococcal pneumonia, a positive blood culture or positive culture from secretions obtained from bronchoscopic aspiration is usually found. An elevated antistreptolysin titer is also helpful in establishing a diagnosis.

QUESTION: How would you exclude staphlococcal or Friedlanders pneumonia?

Friedlanders and staphlococcal pneumonia resolve slowly and could produce such a picture. The response to penicillin and the inability to demonstrate Klebsiella pneumoniae or staphylococcus aureus on culture are strong arguments against Friedlanders or staphylococcus pneumonia.

QUESTION: Was pneumococcal pneumonia considered a likely diagnosis?

Pneumococcal pneumonia is by far the most common type of primary bacterial pneumonia, accounting for well over 80% of all cases. It seems unlikely that this patient had an uncomplicated pneumococcal pneumonia, since pneumococci were not recovered from the sputum on repeated attempts and resolution was much slower than would be expected in pneumococcal pneumonia.

QUESTION: Why did you make a clinical diagnosis of bronchiogenic carcinoma?

Bronchiogenic carcinoma producing bronchial obstruction and secondary pneumonia should be considered in every case of unresolved or slowly resolving pneumonia. This is particularly true when dealing with males above the age 40 and when dealing with heavy smokers. Every case of pneumonia should be followed reaiographically until resolution is complete and should not be discharged simply because of symptomatic recovery as happened in this case. The presence of clubbing also is suggestive of malignancy of the lung in the absence of other causes. Approximately 75% of patients with bronchiogenic carcinoma have positive studies for malignant cells in the sputum.

SPECIAL ARTICLES

MODERN ETIOLOGY OF NEUROSIS*

SHELBY L. HICKS, M.D.
New Castle, Kentucky

EVERY physician today has observed with alarm and sometimes dismay the increasing number of neurotic patients seen in his daily practice. In my opinion this is one of the most serious and most distressing problems we have to try to cope with in our modern high speed civilization.

Neurosis is defined as a functional disorder of the nervous system. In contrast to psychosis it is a relatively minor disorder of the psychic constitution, it is less incapacitating, and in it the personality remains more or less intact. The neuroses which are most commonly seen in our practice today are: 1. Anxiety neurosis, which is defined as a morbid or unjustified dread. 2. Fatigue neurosis, which is a neurosis due to a nerve tire, can be further split into neurasthenia and psychasthenia. Neurasthenia is nervous prostration, a psychoneurosis of nervous exhaustion characterized by abnormal fatigability. Psychasthenia is a functional neurosis marked by stages of pathologic fear or anxiety, obsessions, fixed ideas, tics, feelings of inadequacy, self-accusation, and peculiar feelings of strangeness, unreality and depersonalization.

We all see many such patients every day. The alarming factor is the increasing number. Neuroses of course manifest themselves in many varied and mysterious ways. One of the interesting aspects of this condition is the way that physical illness in these individuals is altered. We have all observed the person who seems to get along quite alright when well but when ill, goes to bed and nurses his ailment for all it is worth. In the country this is termed the "old sheep reaction." If you have ever observed any sick sheep you will understand the reason for this terminology.

Another type which overlaps and intermingles considerably with this one is the hyperreactor who not only gives up like the old sheep to the minor physical ailments but often reacts rather violently to them in a physical way with too much fever, too much pain, too much shock, or as it would appear to the physician in attendance, too much of whatever he happens to have. This often increases the attending physician's anxiety for even if he knows the individual he can never be more than 95 per cent sure that he is not overlooking something, and sometimes that little five per cent can be a somewhat distressing factor.

Overprotection on the part of parents for their young and many times on the part of the children for aging parents is another facet of this same problem which is sired by anxiety. This fear is passed on to the ones who are being sheltered and in a high percentage brings about the hyperreaction in them. Some of this might well be blamed on the doctor but by no means all. We have all seen the child of the apprehensive, over-protective mother who brings him in with all the appearance of a minor upper respiratory infection and we very positively reassured this mother, with some difficulty, that it is only a minor cold and to give aspirin and nose drops and all will be well in a couple of days, only to have her frantically call at 2 in the morning saying the child is in a convulsion or have her bring him back in three days with pus dripping out of the ear, or a lung full of rales, so don't blame yourself too much after this happens once or twice to this child for accepting the inevitable and starting some antibiotic when the mother says he has a cold. He then soon becomes a hot house plant and requires specific medication each time he sniffles.

Some people because of anxiety have no judgment for evaluating illness; they can make a heart attack out of the slightest chest discomfort or a cancer out of the smallest gas bubble. For much of this we have the lay press, radio and TV to thank, a very good illustration that a little knowledge is a dangerous thing. Incidentally the voluntary health organizations are guilty of sowing a lot of seed in this fertile field also as you all certainly recognize. One can hardly expect the suggestible individual to withstand the terrific bombardment which he is under today.

Anxiety lowers the general body resistance. This is obvious from the patient who is always unconsciously looking for something to catch and usually finding it. He literally thinks himself into being sick. Not long ago a man told me he used to have one cold after another until finally he decided colds were a "bunch of d--- foolishness" after which he had no more. That was over two years ago. To be sure this is an extreme illustration but it is my belief that if one would work hard enough at it at least some results could be obtained.

Today people are afraid of the normal everyday problems of life. They are afraid of pain, afraid of insecurity, afraid of fear and in short afraid of life. When we look upon our world today and realize that everything is moving with such astronomical speed we can see that this fear does have some basis: however, man brought about this modern civilization, therefore it is up to man to face the responsibility. This certainly cannot be done by seeking relief from our anxieties with tranquilizers, barbiturates and similar medications.

It has been reported that in the past twelve months

*Presented at the May 29, 1957, meeting of the Seventh Councilor District at Frankfort.

100 million dollars were spent by Americans for the new tranquilizing drugs. Whether or not this figure is accurate it is certain that the sum spent was tremendous. Millions of Americans are seeking happiness in pills. We cannot find happiness by masking our normal reactions. From what are we trying to hide? We are undoubtedly trying to hide from normality. We are running from the strain and stress that the human organism was designed to stand and is entirely capable of standing. Fear is an emotion which is not comfortable and if it is allowed to go uncontrolled it is dangerous, but there is good reason for our capacity to feel this emotion. The anxiety that keeps one doing his best from day to day and causes him to meet an emergency when one arises is normal and should be recognized as such.

Many people have the mistaken impression that all anxiety is to be avoided. This is an error in their thinking which may have been brought about by their earlier training, or lack of it, in never being taught to face trouble. This error in thinking is not straightened out by tranquilizers or similar drugs. Nor is it corrected by social reforms, social security, cradle-to-the-grave legislation, subsidy or other government handouts.

Why is our great nation so consumed by this monster? The terrific pace of the atomic age of course is one of the motivating factors, but there is more than this. We have lost something which is hard if not impossible to define. Maybe it is the pioneer spirit. Maybe we have glorified ourselves to the point of substituting intellectuality on our part for Christian Faith. Sir William Osler once said, "Nothing in life is more wonderful than faith—the one great moving force which we can neither weigh in the balance nor test in the crucible."[1]

Dr. Claude E. Forkner, professor of clinical medicine at Cornell University Medical College said, "Very often we do not know what it is that brings about the recovery of the patient. I am sure that often it is faith which is a most important factor."[1] Too many of us have allowed our faith to get side-tracked and it has remained in ourselves or has been placed in the government. We have permitted the government to take over on jobs we should be doing as individuals. Our idea is to get everything possible without stopping to realize that all we are doing is getting back only a small portion of what we put in. Then we pat ourselves on the back because we have done a good job. Who are we kidding? We give very generously to large voluntary health organizations so they can conduct fabulous publicity campaigns to scare more people into being neurotics, and some research foundation can spend large sums of money on some rare disease when morbidity and mortality from common diseases continue because of lack of interest or funds.

Why can't we put first things first? It would seem we concentrate too much on length of life. What good is an arterosclerotic vegetable to himself or anyone else? Johann Heinrich Cohausen who died in 1750 said "Some misguided enthusiasts have believed that by lengthening the span of life they would confer a priceless boom on the human race; forgetting that it is not the length of the day which makes us love the summer, but the brightness of the sun, the beauty of the flowers, and the singing of the birds."[2]

We are a generation of conformists. We feel that our security lies in conformity, never getting more than a very short distance away from the common herd. Our work has become drudgery, our goal is to put in just as little time as possible for as much money as possible, and retire as quickly as possible. In other words our goal is complete laziness, intellectually and physically, with few exceptions. We are not determined to be defiant or skeptical; that takes too much individuality, initiative, integrity and courage. We are determined to be ordinary and mediocre. We live as comfortable parasites on the courage of past generations. We are a generation which tends to equate morality with the status quo, putting cleverness before goodness, success before sincerity, and achievement before integrity.[3] We sacrifice freedom for false security and principle, the law of civilization for expediency and the law of the jungle.

This spirit of conformity is present in all professions and groups, and our beloved profession is no exception. How often have we acted in accordance with the desires of some contrary patient when we knew that it probably was not the best mode of therapy because we were unwilling to reason with this person as to just what might be better for him. Maybe we rationalized that the therapy he requested was better anyway since antagonism might be detrimental to his condition. How often have we ordered skull X-rays when a trivial head injury was sustained because we were afraid of a possible lawsuit? Or how often have we said we will try this and if you do not feel better come back in a week when we should have said you have no disease come back when you are sick. I am sure we can all think of some such instances when we have been a little guilty.

The therapy for the affliction of which I am speaking lies not in being conformed by our environment but rather in transforming our environment both as individuals and as a nation. Transforming our fears into courage is the answer. Courage is not absence of fear; it is harnessing fear to a useful end. This cannot be done by burying it with medications. This transformation is not brought about easily. In my humble opinion it actually means a spiritual rebirth of our nation. I do not mean a popularization of religion. I do mean a development of a deep sense of humility and realization that whatever we do, have or are is due to the Grace of God and not of ourselves. If this simple fact could be believed and remembered by everyone many of our problems, neurotic and otherwise, would be non-existent.

I certainly cannot recommend any specific regimen or ritual to be followed daily to bring this about. I can only give you this quote from the Bible, found in II Chronicles 7:14, "If my people who are called by my name shall humble themselves and pray, and seek my face, and turn from their wicked ways, then will I hear from heaven, and will forgive their sin, and will heal their land."[4]

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EDITORIALS

THE ROLE WE HAVE CHOSEN

NO doctor is unaware of the struggle that has ensued for so many years between voluntary or private health plans and proposed government control of medicine. What we may not have realized fully is that each of us, every day, can play a vital part in this struggle of ideas . . . a vital part that will retain for us the most workable, worthwhile system of medical practice known. The Blue Shield Plan is our own answer to the clamor from some quarters for socialized medicine. It must be protected—not abused.

It is often said by some, in complacency, that the stresses existing a number of years ago are no longer with us; that socialized medicine is no longer a possibility here in the United States. It is true that we have made great progress in demonstrating the workability of voluntary health prepayment plans, but there is yet much more ground to be covered . . . and it can only be covered by us, the members of the medical profession.

We have created this corporate body . . . the Kentucky Physicians Mutual . . . more popularly known as Blue Shield. It is ours, and of it we have just cause to be proud. It represents the role we have chosen.

There are many ways in which we, as doctors, can help Blue Shield grow and consolidate its strength. Basically, we must constantly sell and re-sell ourselves on the philosophy of Blue Shield, and on its advantages to the public. One way that we can begin to do this is to "take our own medicine" . . . to enroll ourselves and our entire families, and our employees, in Blue Shield, so that we know whereof we speak when we talk to our patients of Blue Shield protection, security, and peace of mind.

The public will have faith in Blue Shield so long, and only so long, as it knows we, the doctors, have faith in it, and continue to endorse it. This enthusiastic endorsement is one of the reasons that the Blue Shield plan has reached its present stature. We must gird ourselves to carry it further. So long as our faith is evident, no third party can prevail.

It is easy for a doctor to "sell" Blue Shield to a patient. He comes to you for medical advice and you have the power to dispel his doubt and fear. Recommend Blue Shield. You have seen the workings of other plans, their costly administration, their delays, and you know the opposite to be true regarding Blue Shield. Just a word, and a Blue Shield information card, is all it takes. The main thing is that the patient knows you endorse your own plan.

Of equal importance is your relation with business leaders and opinion moulders. Virtually every day of the week, some one of your many friends is being approached regarding an employee-group plan for health care. It is widely recognized that the most frequently used portion of the private-industry benefit package is the hospital and surgical protection segment.

A one-year survey of 10,000 workers showed that the workers and their dependents used their surgical protection in 2,235 cases and their hospital protection in 4,062 cases. Obviously the employer is concerned. He wants the worker on the job, and well and happy. And he wants the worker to know that his dependents will be cared for as needed, and that his financial load is easier to meet because of his foresight in carrying Blue Shield. In other words, he wants workers with peace of mind, with their minds on the job. That is business, and that is what the businessman is interested in. Blue Shield lets its record of service to over 5,100 group plans in Kentucky stand as its best testimonial. The testimonial only needs voicing . . . by you.

Yes, we have chosen a role . . . the continuance of medical practice as we know it for the greatest good for the greatest number without outside interference. Our strong right arm is Blue Shield. With our individual and collective help, it shall prevail.

J. Duffy Hancock, M. D.

MEDICAL RESEARCH FOUNDATION ESTABLISHED FOR TAY-SACHS' DISEASE AND ALLIED DISORDERS

A NEW non-profit foundation has been established to support and stimulate research, clinical, and educational programs in Tay-Sachs' disease and allied heredo-familial, neurodegenerative diseases of infancy and childhood. The scope of the program will include, in addition to Tay-Sachs' disease, Niemann-Pick's disease, Infantile Gaucher's disease, Schilder's disease, Diffuse Sclerosis, Amyotonia Congenita, Friedreich's ataxia, and others. The foundation is known as National Tay-Sachs Association, Inc. and is composed of parents who have had afflicted children, interested laymen, and medical personnel in the field.

The foundation is cooperating with the existing clinical and research program on Tay-Sachs' disease and certain of these allied diseases at Jewish Chronic Disease Hospital in Brooklyn, New York. The hospital is presently conducting a special clinic for outpatient care of afflicted children, and is constructing a special ward for the care and observation of inpatient cases. Both of these programs are being conducted in conjunction with the laboratory research program of the Isaac Albert Research Institute of the hospital. A comprehensive genetic study is also being made of the pertinent hereditary patterns from histories supplied by the foundation and parents who have children under the care of the hospital. A counseling program is also offered.

The operation of the foundation is on a nationwide basis, and contact is being made for establishment of chapters in other metropolitan areas, in addition to the Tay-Sachs' Association in New York City and Philadelphia. In order to further its work and, in particular, to prepare a substantial genetic study covering the entire country, physicians and hospitals are respectfully requested to make the existence of the foundation known to parents of children afflicted with these diseases.

We have already a number of foundations for promotion of study in various specific diseases and are familiar with their annual appeals. This latest one comprises a group of relatively rare diseases, mostly unfamiliar to us. To the family with a child so affected, however, these facitities will be most welcome and it is a part of our responsibility to be in position to inform them and help in securing the best care our profession has to offer.

Sam A. Overstreet, M. D.

Opinions expressed in contributions to The Journal are those of the writers and do not necessarily reflect the views of the Kentucky State Medical Association.

Attend *YOUR*

COUNTY SOCIETY OFFICERS CONFERENCE

Featuring

Outstanding Guest Speakers from Five States

March 27, 1958

Phoenix Hotel **Lexington**

ORGANIZATION SECTION

Ground Broken for Med. School at U of K on Dec. 10

Richard G. Elliott, M. D., Lexington, Eastern Vice President of the KSMA, represented President Edward B. Mersch, M. D., Covington, at ground breaking ceremonies for the University of Kentucky's new $26,000,000 medical center on December 10.

University of Kentucky President Frank G. Dickey, who presided at the ground breaking, announced that the center would be called the Albert B. Chandler Medical Center in honor of the Governor who is Chairman of the Board of Trustees. Governor Chandler, spoke briefly and turned the first spade of dirt in the traditional ceremony, which was attended by 300, including a number of KSMA officers and members.

In a brief speech at the ceremony, Doctor Elliott congratulated the University of Kentucky on its progress and also had kind words for the University of Louisville School of Medicine for producing so many national leaders in medicine. He said that "with both schools, Kentucky should become even more active in the nation's medical developments."

"The new medical center will endeavor to blend the established patterns of today with the trends of tomorrow," according to Dean William R. Willard, M. D., vice president of the center. He said human behavior and understanding will be used in both the teaching and in the curriculum itself, and that there will be no "lock step" progression through the curriculum without considering the special interests and abilities of the students.

"In building the Center, emphasis will be on the functional aspects, with every effort being made to economize in construction and at the same time maintain primary emphasis on efficiency and quality," he said.

The six-story medical sciences building, scheduled to open in 1959, will be the central unit. Attached to it will be an eight story 400 bed hospital, which will serve the state.

Students at the school will have "thinking offices" —an innovation in medical school methods, providing private cubicles with a desk, locker, bookshelf, and microscope—simulating the actual situation of a doctor in practice.

These cubicles will be near the library, which will contain 25,000 publications when it opens and is ex-



Participating in ground-breaking ceremonies at the new medical center at the University of Kentucky were (left to right) William R. Willard, M. D., vice president of the Center; Richard G. Elliott, KSMA Eastern Vice President; Governor Albert B. Chandler, who turned the first spade at the ceremony; and Frank G. Dickey, President of the University of Kentucky.

pected to grow to include an eventual 70,000 publications.

Following the ground breaking, University President Dickey held a reception at Maxwell House, his residence on campus. That evening, 300 guests attended a dinner meeting where Vernon W. Lippard, M. D., Dean of the Yale University School of Medicine spoke. He stated that the center "could not be born at a more propitious moment."

Co. Society Officers to Hear Outstanding Speakers

Outstanding guest speakers from five states will be featured at the County Society Officers Conference at the Phoenix Hotel in Lexington on March 27, according to Edward B. Mersch, M. D., KSMA president.

Heading the list of speakers will be Gunnar Gundersen, M. D., LaCrosse, Wisconsin, president-elect of the American Medical Association.

Topics to be discussed at the one-day meeting for county society officers will include: the corporate practice of medicine, third party medicine, voluntary health insurance, and other socio-economic problems affecting organized medicine.

President Mersch requests all county societies that have not already done so, to send the names of their county society officers and committees for 1958 to the KSMA Headquarters Office, 1169 Eastern Parkway, Louisville 17, Kentucky, so that they will receive a program and special invitation to the County Society Officers Conference on March 27.

All county medical society officers and committee chairmen and all KSMA committee chairmen were urged by Doctor Mersch to attend this conference, which is planned each year specifically for them.

Dr. Orr Senior Day Speaker

Louis B. Orr, M. D., Orlando, Florida, vice speaker of the AMA House of Delegates, will be featured speaker at the fourth annual Senior Day Program in the Brown Hotel on April 21, according to Richard G. Elliott, M. D., chairman of the Senior Day Committee.

Doctor Orr, who was for many years chairman of the AMA's Committee on Veterans Affairs, will address the members of the U of L School of Medicine graduating class at the one-day meeting sponsored by KSMA in close cooperation with the Jefferson County Medical Society, and the University.

Memorial to the Hagans Started

The families and friends of the late Doctor and Mrs. William Hart Hagen, who died in the crash of an airliner over the Pacific while enroute to the Pan Pacific Surgical Association meeting in Honolulu, have set up an endowment fund for research at the University of Louisville School of Medicine.

The Fund will be called the William H. and Norma Perkins Hagan Surgical Research Fund. As its principal sum increases from contributions, its earnings will widen the hiring of technicians and the purchase of equipment at the School where Doctor Hagan was a part-time instructor in surgery.

Dr. Hoffman Reports on Success of Diabetes Detection Drive

Early returns from 50 counties indicate that the seventh annual Diabetes Detection Drive sponsored by the KSMA will be successful in its goal of discovering previously unknown diabetics, acording to Robert Hoffman, M. D., South Fort Mitchell, chairman of the KSMA Associate Committee on Diabetes.

Incomplete reports from all over the state show 11,138 tested and a total of 80 newly proved diabetics. There were 174 proved diabetics tested and 296 positive readings reported.

Doctor Hoffman urges that all physicians turn their reports on discovered diabetics in to their county committee chairmen as soon as possible.

"A serious effort is being made to follow up on diabetics discovered through the drive," Doctor Hoffman said, "and for this reason many of the reports have not yet come in."

This annual life-saving project is sponsored by the Association in cooperation with the American Diabetics Association. This year's drive, the week of November 17-23, was officially proclaimed by Governor Chandler.

Ky. M.D.'s at AMA Meet

The Clinical Session of the American Medical Association in Philadelphia, December 3-6 was attended by 18 Kentucky physicians.

Those attending the meeting according to the AMA's *Daily Bulletin* were: George S. Allen, Malcolm L. Barnes, W. McDaniel Ewing, Robert C. Long, Louisville; William E. Beckmeyer, Fort Thomas; Paul A. Bryan, Hugh L. Ray, Ashland; Walter G. Crowe, Berwind W. Kaufmann, Whitesburg; Henry Evans, Harlan; Marvin C. Fraley, McDowell; Robert T. Lott, L. A. Warner, Jr., Middlesboro; Howard R. Moloney, W. Vinson Pierce, Covington; Robert E. Pennington, D. D. Turner, London; and Edwin S. Wilson, Pineville.

Symposium on Heart Diseases Scheduled in March

Three hundred physicians are expected to attend the Fourth Annual Symposium on Cardiovascular Diseases, Friday and Saturday, March 7-8, on the Roof Garden of the Brown Hotel in Louisville.

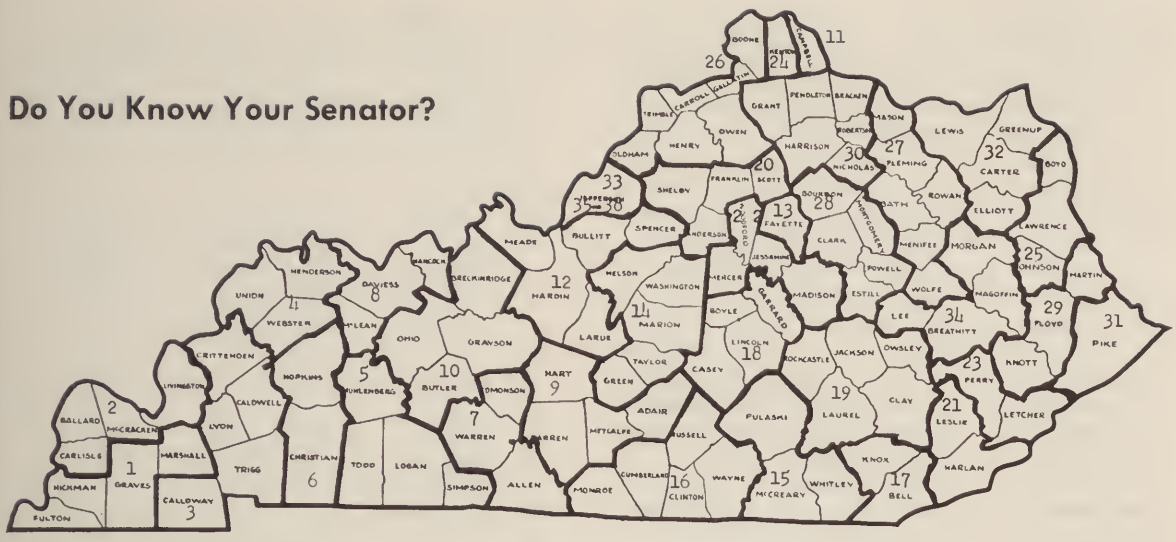
The symposium, which is sponsored annually by the Heart Association of Louisville and Jefferson County and the University of Louisville School of Medicine, will feature scientific sessions and a dinner following the Friday sessions.

Physicians on the Symposium Committee are: John S. Llewellyn, chairman; George W. Pedigo, Jr.; Jack Chumley; Walter S. Coe; W. Burford Davis; C. Howe Eller; Hugh B. Lynn; and Ralph M. Denham.

AAGP to Meet in Dallas, March 24 - 28

The tenth annual scientific assembly of the American Academy of General Practice will open in the new Dallas Memorial Auditorium in Dallas, Texas, on March 24. The four-day conference will include Dallas Southern Clinical Society Day on Tuesday, March 25.

Do You Know Your Senator?



Number denotes Kentucky Senatorial District and indicates county in which Senator lives.

List Kentucky State Legislators Serving in 1958

"If you are interested in good state government, express yourself to your state senator and representative when he is at home this weekend," advises Thomas P. Leonard, M. D., Frankfort, chairman of the KSMA Committee on Legislation.

In order to assist members of KSMA in contacting their legislators during the 1958 session of the Kentucky General Assembly, the Journal is listing their names, addresses, and districts and maps showing the counties they serve.

Kentucky General Assembly 1958 Members of Senate

District	Home County	Senators
1	Graves	Wayne W. Freeman-D, Mayfield
2	McCracken	Strother Melton-D, Paducah
3	Calloway	George E. Overbey-D, Murray
4	Webster	J. Murray Blue-D, Providence
5	Muhlenberg	John W. Willis-D, Greenville
6	Christian	Frank Bassett, Jr.-D, Hopkinsville
7	Warren	C. W. Robinson-D, Bowling Green
8	Daviess	E. W. Richmond-D, Owensboro
9	Hart	Lloyd M. Greene-D, Cave City
10	Butler	Ulysses G. Byers-R, Welchs Creek
11	Campbell	Louis Reuscher-D, Fort Thomas
12	Hardin	Clyde S. Howard-D, Elizabethtown
13	Fayette	John C. Anggelis-D, Lexington
14	Marion	Broadus E. Hickerson-D, Lebanon
15	McCreary	O. O. Duncan-R, Whitley City
16	Clinton	Ed P. Warinner-R, Albany
17	Bell	Denver C. Knuckles-R, Middlesboro
18	Lincoln	Cabel D. Francis-D, Stanford
19	Laurel	Fred V. Lucas-R, London
20	Scott	Jas. R. Hamilton-D, Georgetown
21	Leslie	A. E. Cornett-R, Hyden
22	Woodford	E. Paul Jackson-D, Versailles
23	Perry	Merlin B. Fields-D, Hazard
24	Kenton	James C. Ware-D, South Ft. Mitchell
25	Johnson	Wendell Van Hoose-R, Tutor Key
26	Gallatin	Alvin Kidwell-D, Sparta
27	Fleming	Ed J. Kelly-D, Flemingsburg
28	Bourbon	Cassius M. Clay-D, Paris
29	Floyd	Jerry F. Howell-D, Price
30	Nicholas	H. Stanley Blake-D, Carlisle
31	Pike	J. E. Johnson, MD-D, So. Williamson, W. Va.
32	Carter	Mrs. J. H. Davis-R, Grayson
33	Jefferson	Bernard J. Bonn-D, Louisville
34	Breathitt	Chas. H. Davis-D, Jackson
35	Jefferson	Martin J. Duffy, Jr.-D, Louisville
36	Jefferson	W. Scott Miller, Jr.-R, Louisville
37	Jefferson	C. W. A. McCann-D, Louisville
38	Jefferson	Gates F. Young-D, Louisville

Kentucky General Assembly* 1958 Representatives

District	Home County	Representatives
1	Hickman	Huston Johnson-D, Clinton
2	Ballard	Geo. Lovelace-D, Barlow
3	Graves	Lon C. Barton-D, Mayfield
4	McCracken	Chas. A. Williams-D, Paducah
5	McCracken	R. C. McGuire, Jr.-D, Paducah
6	Marshall	Shelby McCallum-D, Benton
7	Calloway	Owen Billington-D, Murray
8	Trigg	Joe E. Nunn,-D, Cadiz
9	Christian	T. Fowler Combs-D, Pembroke
10	Hopkins	Edgar Arnold, Jr.-D, Madisonville
11	Livingston	Everett E. Cook,-D, Smithland

*See map on next page

District	Home County	Representatives
12	Union	Will Tom Wathen-D, Morganfield
13	McLean	Richard Hopkins-D, Calhoun
14	Henderson	John A. Clore-D, Henderson
15	Daviess	Patrick Tanner-D, Owensboro
16	Daviess	R. Douglas Ford-D, Owensboro
17	Muhlenberg	Jas. P. Hahn-D, Greenville
18	Ohio	Wayland Render-R, Centertown
19	Todd	Orville Finney-D, Guthrie
20	Logan	Paul E. Young-D, Olmstead
21	Allen	Willie McReynolds-D, Scottsville
22	Warren	Paul Huddleston-D, Bowling Green
23	Edmonson	Walter F. Davis-R, Brownsville
24	Grayson	Homer Hodges-R, Leitchfield
25	Hardin	Paul Ford Davis-D, White Mills
26	Meade	Ralph O. Stith-D, Guston
27	Barren	James Mewberry-D, Glasgow
28	Metcalfe	Wallace Bartley-R, Summer Shade
29	Green	Ben Burress-R, Greensburg
30	Marion	C. J. Richards-D, Lebanon
31	Larue	Vernon Reed-D, Hodgenville
32	Nelson	Alvan W. Wells-D, Bardstown
33	Spencer	D. C. Casey, Jr.-D, Mt. Eden
34	Jefferson	Marlow W. Cook-R, Louisville
35	Jefferson	Thomas L. Ray-D, Fairdale
36	Jefferson	Wm. J. Crecelius-D, Louisville
37	Jefferson	Frank W. Burke-D, Louisville
38	Jefferson	Clarence R. Miller-D, Louisville
39	Jefferson	John W. Farmer-D, Louisville
40	Jefferson	Edwin A. Rausch-D, Louisville
41	Jefferson	C. E. Baumgardner, Sr.-D, Louisville
42	Jefferson	F. S. Anderson-D, Louisville
43	Jefferson	Albert Steiger, Jr.-D, Louisville
44	Jefferson	Eulick Walsh-D, Louisville
45	Washington	Jack Raybourne, Jr.-D, Springfield
46	Boyle	Ed Kubale, Jr.-D, Danville
47	Madison	Jerry W. Parrish-D, Richmond
48	Jessamine	Robert L. Gullette-D, Nicholasville
49	Fayette	John Breckinridge-D, Lexington
50	Fayette	Foster Ockerman-D, Lexington
51	Franklin	Alton Moore-D, Frankfort
52	Shelby	Paul T. Ratcliffe-D, Shelbyville
53	Oldham	Otis R. Chaudoin-D, Pewee Valley
54	Gallatin	T. Herbert Tinsley-D, Warsaw
55	Grant	Ed Thomas-D, Dry Ridge
56	Scott	W. K. Henry-D, Georgetown
57	Carroll	Roy Searcy, Jr.-D, Carrollton
58	Kenton	Gilbert Kingsbury-D Fort Mitchell
59	Kenton	Vernor O. Cottengim-D, Covington
60	Kenton	John J. Isler-D, Covington
61	Kenton	T. P. Fitzpatrick-D, Covington
62	Campbell	Chas. W. Wirsch-R, Highland Heights
63	Campbell	Morris Weintraub-D, Newport
64	Bracken	Finnell L. Fields-D, Brooksville
65	Mason	Addison L. Everett-D, Maysville
66	Robertson	True Mackey-D, Mt. Olivet
67	Bourbon	Brooks Hinkle-D, Paris
68	Clark	Wm. Weathers Haley-D, Winchester
69	Montgomery	Stanley R. Thomas-D, Mt. Sterling
70	Bath	Charles H. Hart-D, Sharpsburg
71	Lewis	Hobart Rayburn-R, Vanceburg
72	Greenup	Jas. Wm. Lyon-D, Greenup
73	Carter	Roger E. Quallis-R, Olive Hill
74	Knott	Bill Cornett-D, Hindman
75	Wolfe	Edward E. Bach-D, Campton
76	Lee	Russell Reynolds-D, Beattyville
77	Estill	A. Floyd Bush-D, Ravenna
78	Owsley	Carl R. Reynolds-R, Booneville
79	Rockcastle	Murphy Whitehead-R, Broadhead
80	Lincoln	Emery Wilson-D, Stanford
81	Russell	Orvin G. Coffey-R, Jamestown
82	Cumberland	Claude R. Willen-R, Burkesville

Find Your Representative Here



Number denotes Kentucky House of Representative District and indicates county in which Representative lives.

District	Home County	Representatives
83	McCreary	Archie Brown-R, Stearns
84	Pulaski	Leonard Hislope-R, Somerset
85	Whitley	Warren Peace-R, Rockhold
86	Laurel	Paul Cornett-R, East Bernstadt
87	Knox	Chas. W. Buchanan-R, Barbourville
88	Bell	Durham W. Howard-R, Pineville
89	Harlan	W. A. Buckner-R, Evarts
90	Harlan	H. Nick Johnson-R, Harlan
91	Leslie	Clay Gay-R, Hyden
92	Letcher	Hillard Kincer-D, Neon
93	Perry	Chester Duff-R, Hazard
94	Pike	Jack Sowards-R, Shelbiana
95	Pike	Dr. W. J. Smith-D, Belfry
96	Floyd	Sam Hale-D, W. Prestonsburg
97	Floyd	Mrs. Ann B. Hall-D, Bypro
98	Martin	Albert Dempsey-R, Inez
99	Elliott	Johnnie Greene-D, Sandy Hook
100	Boyd	Harry K. Lowman-D, Ashland

Report on Important Actions Taken by AMA House of Delegates

Actions relating to the free choice of physician, the Forand Bill providing hospital and surgical benefits for social security beneficiaries and their dependents, fluoridation of public water supplies, and certain reorganization phases in the headquarters office were among the more important matters disposed of by the AMA's House of Delegates at the Association's Eleventh Clinical Meeting in Philadelphia, December 3-6.

W. Vinson Pierce, M. D., Covington, and Robert C. Long, M. D., Louisville, represented the KSMA at the session. Doctor Long, who attended for the first time, is filling out the unexpired term of the late Clark Bailey, M. D., Harlan.

Acting on the issue of free choice of physician in relation to contract practice, the House passed the resolution which reaffirmed approval of previous interpretations of the principle of medical ethics by the Association's judicial council, and directed that they be called to the attention of all constituent associations. An opinion of the judicial council issued in 1927, which was reaffirmed, stated that the contract practice of medicine would be determined to be unethical if "a reasonable degree of free choice of physician is denied those cared for in a community where competent physicians are readily available."

The House adopted another resolution which related to the free choice of physician and condemned the current attitude and method of operation of the United Mine Workers of America Welfare and Retirement Fund as "tending to lower the quality and availability of medical and hospital care to its beneficiaries." The resolution called for a broad educational program to inform the public, including beneficiaries of the Fund, concerning the benefits to be derived from the preservation of American rights to freedom of choice of physician and hospital.

In another action the House of Delegates condemned the Forand Bill, HR 9467, as unwise legislation. It approved a firm position taken in opposition to the bill and expressed satisfaction that the Board of Trustees had appointed a special task force which is seeking to defeat the bill. The House also commended the Association's President, David B. Allman, M. D., Atlantic City, for his excellent address. Doctor Allman urged all members of the AMA to inform themselves of the Bill and make their views known to their Congressmen.

An 8-inch snowfall that had paralyzed Philadelphia traffic, apparently had no influence on relieving the intensity of the heat in the fluoridation issue, which was the most controversial issue handled by the House. After 55 minutes of debate, the House voted overwhelmingly to endorse the fluoridation of public water supplies as a safe and practical method of reducing the incidence of dental caries during childhood.

In other actions, the House voted to combine the office of Secretary and Treasurer with the provision that he should be selected by the Board of Trustees from one of its members. The office of Secretary and General Manager was discontinued and the new office of Executive Vice President was created. The latter will be appointed by the Board of Trustees and will be chief staff executive of the Association.

Other actions authorized the sending of informational material on House of Delegates meetings prior to the opening of the session to all alternate delegates, asked the Board of Trustees to study the feasibility of having the Association finance a thorough investigation of the social security system by a qualified private agency, and endorsed a recommendation that the Committee on Federal Medical Services sponsor a national conference on veterans medical care in 1958.

World-Wide Work of U. S. Doctors Depicted on TV, Jan. 23

"MD International," an hour-long show depicting the work of American physicians in remote areas of the world, will be aired coast to coast on January 23, at 10 p.m. EST over the NBC-TV network.

The show is part of a joint American Medical Association and Smith, Kline and French Laboratories project to inform the American public of activities in the health profession for the promotion of better international understanding.

A special March of Medicine team traveled more than 34,000 miles to film the show, which will include reports on doctors' activities in thoracic and general surgery, orthopedics, ophthalmology, and general medicine in far-flung areas like Hong Kong, Korea, Burma, Sarawak, Nepal, India, Lebanon, and Ethiopia.

Louisville M.D.'s Exhibit at AMA

"Cervicitis in Office Practice," a scientific exhibit presented by Malcolm L. Barnes, M. D., and George S. Allen, M. D., of Louisville, was among the more popular scientific exhibits at the Clinical Session of the AMA in Philadelphia early in December.

This was the seventh showing of the exhibit which has been presented at several national meetings and has won several citations for its excellence.

American Hospital Assoc. Opposes the Forand Bill

"The Forand Bill is not a suitable solution to the problem of financing the hospital needs of the aged," according to the American Hospital Association which has outlined its stand on the bill in a statement on "Financing of the Hospital Needs of the Retired Aged."

In explanation of its objections to the Forand Bill, the Association maintained:

"(1) Eligibility of aged beneficiaries is based on attainment of prescribed ages without regard to their employment status and thus invites a progressive reduction of these age levels with the ultimate possibility of a total program of government-financed hospital care.

"(2) The bill makes possible the provision of care for other than health reasons.

"(3) The bill provides inadequate safeguards against governmental interference with the actual operation of hospitals. Such interference would most likely hamper evolution of patterns of hospital service to the detriment of patient care."

The Association also said that it believes "that every realistic effort should first be made to meet these needs promptly by financing hospital care for retired people through other mechanisms utilizing existing systems of voluntary prepayment." If this approach does not appear workable within the immediate future, "the use of social security to provide the mechanism to assist in the solution of the problems of financing hospital needs of the retired aged may be necessary ultimately."

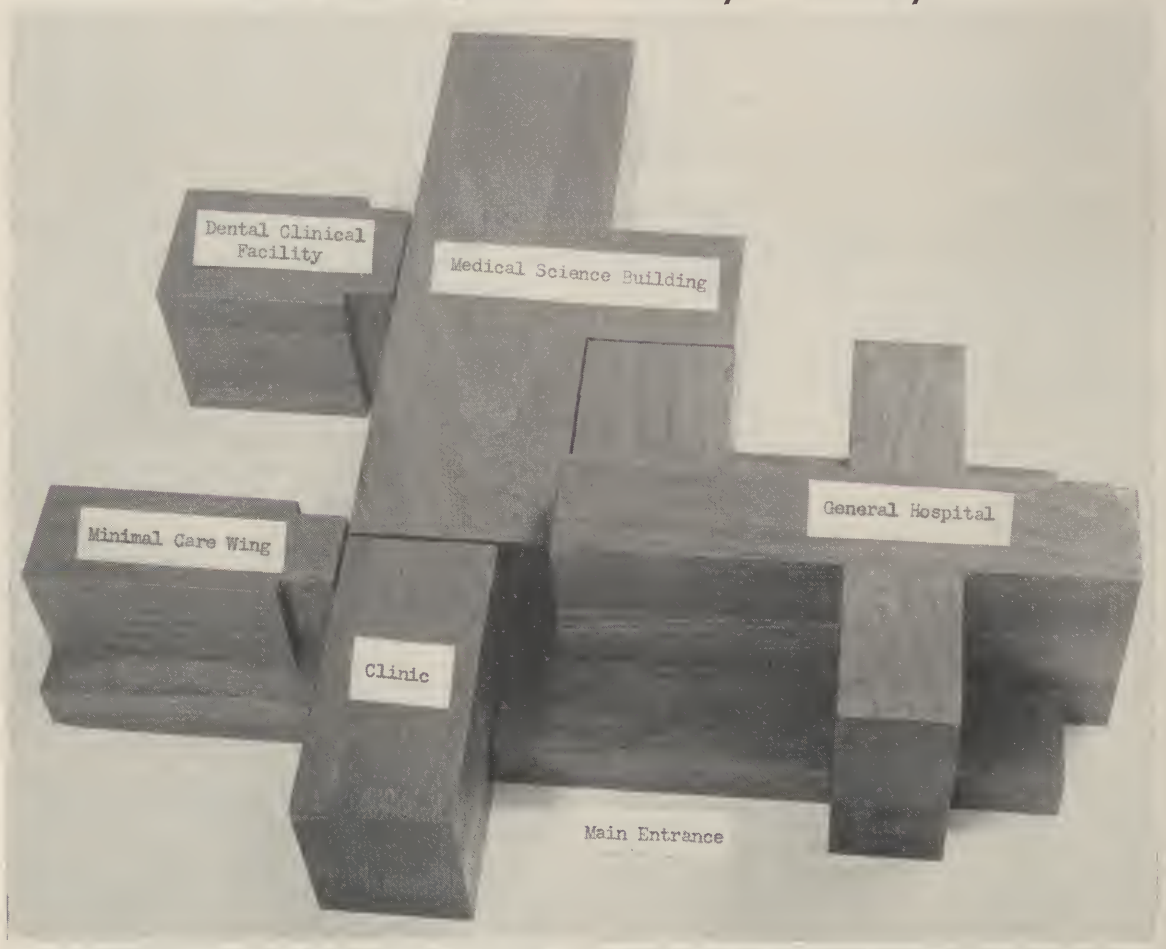
75 Kentuckians Attend Meet of SMA in November

Approximately seventy-five Kentuckians were among the more than 3,000 physicians attending the meeting of the Southern Medical Association in Miami Beach, Florida, on November 11-14.

Kentuckians participating in the scientific portion of the program included: Allen E. Grimes, M. D., Lexington, Marvin A. Lucas, M. D., James E. Ryan, M. D., Jesshill Love, M. D., and W. Fielding Rubel, Louisville. Doctor Love was chairman of the section on radiology and Robert F. Monroe, M. D., Louisville, was vice chairman of the Section on Obstetrics.

Fount Richardson, M. D., Fayetteville, Arkansas,

New Medical Center at University of Kentucky



These blocks serve as a model of the new medical center at the University of Kentucky. The first unit is the T shaped Medical Science Building which will contain laboratories, lecture and seminar rooms for medical, nursing, and dental students, as well as the library and offices for the faculty. Working drawings are now being prepared for the patient care facilities—the University Hospital with its minimal care wing, together with the Dental Clinical Facility which will contain the clinics and offices and laboratories for the clinical faculty.

SEARLE *announces...*

a superior psychochemical
for the management of both
minor and major
emotional disturbances



Dartal T. M.

dihydrochloride — brand of thiopropazate dihydrochloride

- more effective than most potent tranquilizers
- as well tolerated as the milder agents
- consistent in effects as few tranquilizers are

Dartal is a unique development of Searle Research, proved under everyday conditions of office practice

It is a single chemical substance, thoroughly tested and found particularly suited in the management of a wide range of conditions including psychotic, psychoneurotic and psychosomatic disturbances.

Dartal is useful whenever the physician wants to ameliorate psychic agitation, whether it is basic or secondary to a systemic condition.

In extensive clinical trial Dartal caused no dangerous toxic reactions. Drowsiness and dizziness were the principal side effects reported by non-psychotic patients, but in almost all instances these were mild and caused no problem.

Specifically, the usefulness of Dartal has been established in psychoneuroses with emotional hyperactivity, in diseases with strong psychic overtones such as ulcerative colitis, peptic ulcer and in certain frank and senile psychoses.

Usual Dosage • In psychoneuroses with anxiety and tension states *one 5 mg. tablet t.i.d.*

• In psychotic conditions *one 10 mg. tablet t.i.d.*

was installed as chairman of the Council, to succeed A. Clayton McCarty, M. D., Louisville. Other officers named at the meeting included: W. Kelly West, M. D., Oklahoma City, president; Milford O. Rouse, Dallas, president-elect; Edwin H. Lawson, New Orleans, first vice president; Donald F. Marion, M. D., Miami, second vice president.

The 1958 annual meeting of the Southern Medical Association is scheduled for November 3-6 in New Orleans. At that meeting Robert F. Monroe, M. D., Louisville will be chairman of the Section on Obstetrics and Carroll Witten, M. D., Louisville, will be secretary of the Section on General Practice.

Dr. Hess Urges Physician Interest in Civil Defense

"Physicians must take an active interest in their community civil defense and survival phases of atomic war," said Elmer Hess, M.D., newly appointed head of the Health Resources Advisory Committee to the Office of Defense Mobilization, in an address at the annual scientific assembly of the District of Columbia Medical Society.

In his first public address since taking over the federal post, he noted that he had just returned from a tour of U. S. bases in England, West Germany and the Middle East, where he had found the situation very tense. "In the event of an all-out war, a dedicated medical profession will be essential for survival," he said.

Doctor Hess, a former president of the AMA, also advised medical schools to consider the "human qualities" as well as the traditional scholastic standing in selecting medical school candidates.

National Rural Health Conference To Hear Dr. Norvell

Wyatt Norvell, M.D., New Castle, will be featured on the program of the 13th National Conference on Rural Health at the Hotel Heidelberg, Jackson, Mississippi, on March 6-8.

"As the World Turns" is the theme of the conference which is sponsored by the AMA's Council on Rural Health in cooperation with southern state medical associations, farm, educational, and allied organizations. Changing patterns in nutrition, health costs, medical care, dental health, and safety will be discussed.

Doctor Norvell is in charge of a presentation on Thursday evening, March 6, which will show a visit to a doctor's office with emphasis on physical examination.

AMA Meeting Dates are Announced

For those who like to plan ahead, the dates and places for future annual and clinical meetings of the American Medical Association follow:

1958 Annual Meeting, San Francisco, June 23-7.
1958 Clinical Meeting, Minneapolis, Dec. 2-5
1959 Annual Meeting, Atlantic City, June 8-12
1959 Clinical Meeting, Dallas, December 1-4
1960 Annual Meeting, Chicago, June 6-10 (tentative)
1960 Clinical Meeting, Washington, D. C.



James C. Drye, M.D., (left) president of the Louisville Surgical Society, presented the David Y. Yandell Memorial Medal to Robert E. Gross, Boston surgeon, at a meeting of the Society at the Standard Country Club in Louisville on November 26.

Dr. Gross Receives Yandell Award from Surgical Society

Robert E. Gross, M.D., surgeon-in-chief at Boston Children's Hospital and Ladd professor of surgery at Harvard Medical School, was awarded the David Y. Yandell medal for pioneering and imagination in surgery at a meeting of the Louisville Surgical Society attended by about 200 physicians at the Standard Country Club on November 26.

Doctor Gross, who received the award named in honor of the physician who founded the Louisville Surgical Society in 1890, performed the first "patent ductus arteriosus" operation in 1938. He gave the fifth annual Yandell Memorial Lecture at General Hospital on November 25.

His talk before the members and guest of the Louisville Surgical Society was concerned with the problems involved in giving children having sexual malformations the proper sexual assignments in life.

Four State Medical Societies Donate to AMEF

Checks totalling nearly $200,000 from four state medical societies for approved medical schools were presented to Louis H. Bauer, M. D., president of the American Medical Education Foundation before the opening of the AMA House of Delegates on December 3.

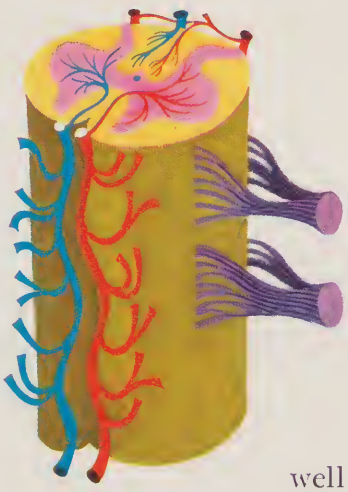
Largest check, totalling $143,043.25 was presented on behalf of the California Medical Association. Other checks were: $10,390 from Utah; $10,000 from New Jersey; and $8,040 from Arizona. Another check was given as a donation from the Interstate Post Graduate Medical Association of North America.

The American Medical Education Foundation, set up in 1951 by the AMA to raise funds from individual physicians to aid medical schools, has raised more than six million dollars since its inception.

relaxes both mind & muscle

without impairing mental or physical efficiency





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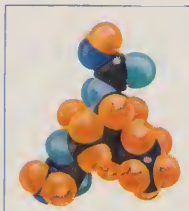
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*Belafsky, H. A., Breslow, S. and Shangold, J. E.: Meprobamate in pregnancy. Obst. & Gynec. 9:703, June 1957.

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Report Federal Med.-Health Spending for '58

Federal medical-health spending for the fiscal year 1958 totalled the approximate figure for last year, 2.5 million, according to a special report issued by the American Medical Association.

The report which covers the period from July 1, 1957 to June 30, 1958 says that at least 23 Federal departments and agencies engage in some medical activity during the year.

Following is a list of the agencies and commissions and amounts spent:

Dept. of Health Education and Welfare	$849,395,800
Veterans Administration	849,374,000
Dept. of Defense	702,305,000
Atomic Energy Commission	40,085,000
International Cooperation Administration	37,300,000
Dept. of State	15,718,110
Fed. Employees Health Program	10,000,000
Dept. of Labor	8,069,476
National Science Foundation	7,500,000
Panama Canal Co. & Panama Government	5,988,300
Dept. of Treasury	3,837,850
Dist. of Columbia	3,700,000
Federal Civil Defense Administration	3,100,000
Department of Justice	1,796,000
Federal Trade Commission	1,500,000
Miscellaneous Agencies	1,813,970
Total	$2,541,483,506

Doctor Hero of Hurricane Named GP of the Year by AMA

Cecil W. Clark, M. D., a 33-year-old country doctor who became a hero to the townspeople of Cameron, Louisiana when Hurricane Audrey claimed more than 500 lives in southwest Louisiana last June 27, was named "General Practitioner of the Year" by the AMA House of Delegates at its session in Philadelphia in December.

The work of Doctor Clark, who received the gold medal award designed to honor the general practitioner who has given exceptional service to his patients and to his community, was described by House Speaker E. Vincent Askey, M. D., Los Angeles.

He said, "Despite severe personal tragedy, when hurricane Audrey struck, Doctor Clark worked 'round the clock for three sleepless days to attend the hundreds of wounded. For his work, Doctor Clark stands as the symbol of what has been described as 'medicine's finest hour'." Three of his five children were killed by a huge tidal wave during the hurricane and at one time he thought his wife and all five children had met with disaster.

A Kentuckian, the late J. I. Greenwell, M. D., New Haven, was the recipient of the gold medal as "General Practitioner of the Year" in 1953. The awards have been presented since 1948.

STUDENT AMA

Three members of the Louisville Student AMA Chapter attended regional meetings of this organization. These meetings were held at the University of Cincinnati on Sunday, November 24, 1957. Certain topics of general importance were discussed. The bulk of the material covered was concerned with improving the function of local chapters.

Rus Staudacher, the national executive secretary of the SAMA, was present at the meetings. He was asked to discuss the status of the SAMA Foundation. The Foundation is an organization being set up within the SAMA to lend money to medical students at low interest rates for tuition or other financial obligations encountered during the training period. Mr. Staudacher said that the most important problem faced by the organizers of this foundation is a lack of federal acceptance by the Bureau of Internal Revenue.

This acceptance must be obtained before money donated to the Foundation is tax deductible. It would appear that a large amount of money is, at present, available or accessible under conditions of federal acceptance of this project. Mr. Staudacher also mentioned the fact that the AMA is withholding its full support of the project until it can be assured that the proposed low interest loans will go to individuals in true need of the money.

After the meetings were adjourned, Mr. Staudacher spoke with the Louisville contingent about an article which appeared in the December, 1957 issue of the KSMA Journal. This article dealt with the reaction of local medical students to the Forand Bill. He pointed out that it was not the policy of the student AMA to become active in political issues.

At this time, it would be well to reiterate what was written in the December SAMA article: "that this article reflects only the opinions of students at the University of Louisville School of Medicine and not the opinions of the University of Louisville or of the national Student AMA."

Clarke Anderson, President
U of L Chapter, Student AMA

Sixth District Elects Officers at December Meeting

Two physicians from Nashville, Tennessee, Harrison J. Shull and John H. Beveridge, presented the scientific portion of the December 10 meeting of the Sixth Councilor District at the Helm Hotel in Bowling Green.

New District officers elected at this meeting include: Lillard F. Beasley, M. D., Franklin, president; Lewis Dickinson, M. D., Glasgow, vice president; and Harold Keen, M. D., Bowling Green, secretary.

Business discussion at the meeting covered attendance at meetings and the possibility of a joint medical society made up of some of the counties in the District which are not now organized. The next meeting is scheduled for sometime in March, when the District will be the guest of the Barren County Medical Society.


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Meat...

and the Protein Need in Renal Disease

Prevailing opinion holds that during the nephrotic state—provided the kidneys are capable of excreting nitrogen in a normal manner—the patient should be given a diet high in protein (1.5 to 2 grams per kilogram of body weight daily). The purpose of such a diet is to replace depleted plasma protein and to increase the colloidal osmotic pressure of the blood.

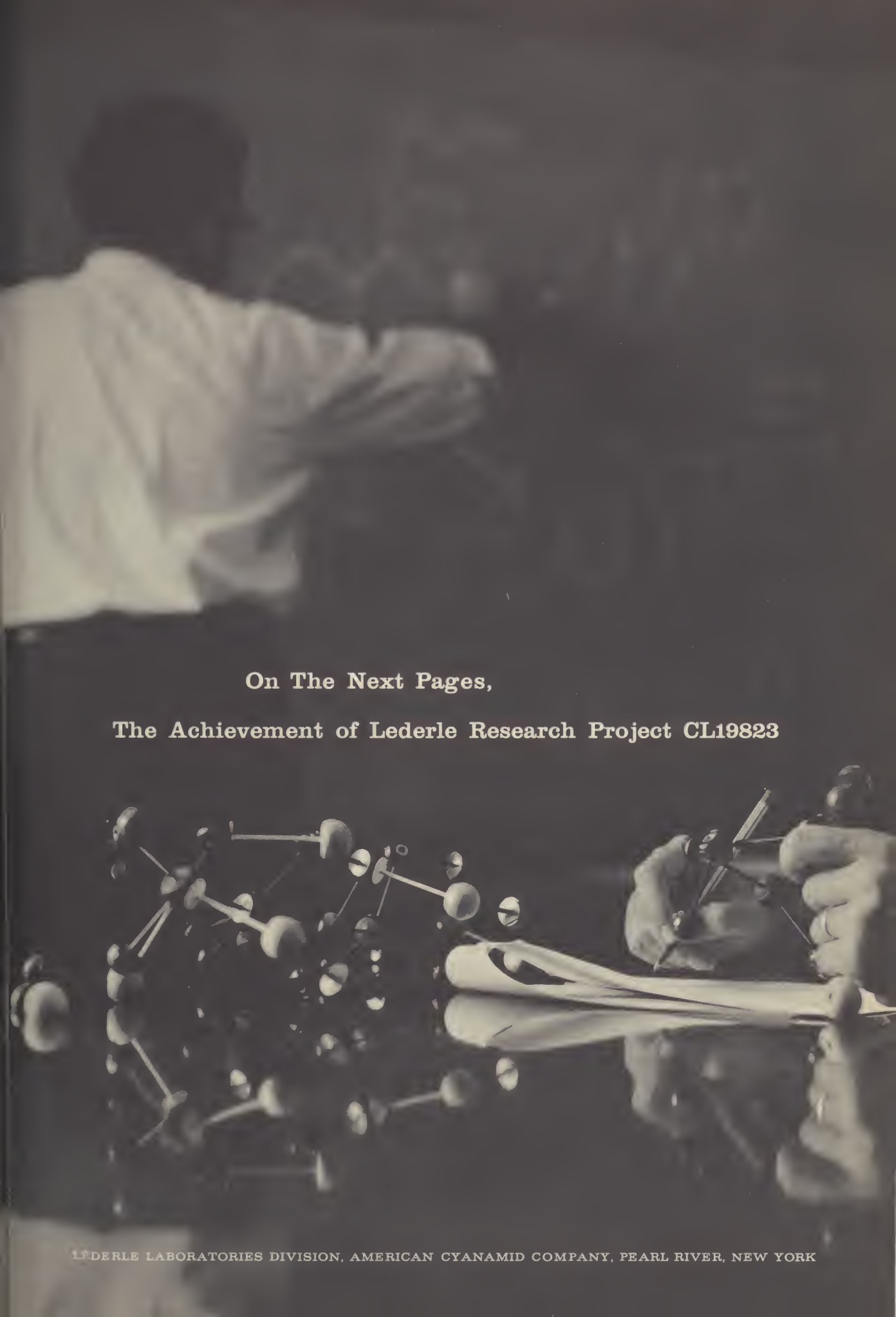
Sharp restriction of dietary salt appears indicated only in the presence of edema, but moderate restriction is usually recommended.

Lean meat is admirably suited for the diets prescribed in most forms of renal disease. It supplies relatively large amounts of high quality protein and only small amounts of sodium and chloride. Each 100 Gm. of unsalted cooked lean meat (except brined or smoked types) provides approximately 30 Gm. of protein, and only about 100 mg. of sodium and 75 mg. of chloride.

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The nutritional statements made in this advertisement have been reviewed by the Council on Foods and Nutrition of the American Medical Association and found consistent with current authoritative medical opinion.

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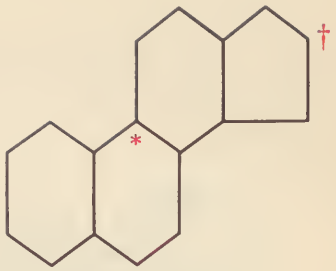
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- **a new low** in the collateral hormonal effects associated with all previous corticosteroids
  - No sodium or water retention
  - No potassium loss
  - No interference with psychic equilibrium
  - Lower incidence of peptic ulcer and osteoporosis

Biological Effects of Aristocort

with particular emphasis on:

Kidney function

Animal studies on ARISTOCORT[1] have not demonstrated any interference with creatinine or urea clearance. Autopsy surveys of organs of animals on prolonged study of this medication have shown no renal damage.

Sodium and water

ARISTOCORT produced an increase of 230 per cent of water diuresis and 145 per cent sodium excretion when compared to control animals.[1] Metabolic balance studies in man revealed an average negative sodium balance of 0.8 Gm. per day throughout a 12-day period on a dosage of 30 mg. per day.[2] Additional balance studies showed actual sodium loss when ARISTOCORT was given in doses of 12 mg. daily.[3] Other investigators observed significant losses of sodium and water during balance studies and that those patients with edema from some older corticosteroids lost it when transferred to ARISTOCORT.[4,5] In two studies of various rheumatic disorders (194 cases) on prolonged treatment, sodium and water retention was not observed in a single case.[6,7]

Potassium and chlorides

There was no active excretion of potassium or chloride ions in animals given maintenance doses of ARISTOCORT 25 times that found to be clinically effective.[1] Potassium balance studies in humans[2,3] revealed that negative balance did not occur even with doses somewhat higher than those employed for prolonged therapy in rheumatoid arthritis. Hypokalemia, hyperkalemia or hypochloremia did not occur, when tested, in 194 patients with rheumatoid arthritis treated for up to ten and one-half months.[6,7]

Calcium and phosphorus

Phosphate excretion in animals[1] was not changed from normal even with amounts 25 times greater (by body weight) than those known to be clinically effective. Human metabolic balance studies[3] demonstrated that no change in calcium excretion occurred on dosages usually employed clinically when the compound is administered for its anti-inflammatory effect. Even at a dosage level twice this, slight negative balance appeared only during a short period.

Protein and nitrogen balance

Positive nitrogen balance was maintained during a human metabolic study on maintenance dosage of 12 mg. per day.[3] At dosages two to three times normal levels, positive balance was maintained except for occasional short periods in metabolic studies of several weeks' duration.[2,3]

There was always a tendency for normalization of the A/G ratio and elevation of blood albumin when ARISTOCORT was used in treating the nephrotic syndrome.[8]



Liver glycogen deposition and inflammatory processes

An intimate correlation exists between the ability of a corticosteroid to cause deposition of glycogen in the liver and its capacity to ameliorate inflammatory processes.

In animal liver glycogen studies, relative potencies of ARISTOCORT over cortisone of up to 40 to 1 have been observed. Compared to ARISTOCORT, five to 12 times the amount of prednisone is required to produce varying but equal amounts of glycogen deposition in the liver.[1]

Most patients show normal fasting blood sugars on ARISTOCORT. Diabetic patients on ARISTOCORT may require increased insulin dosage, and occasional latent diabetics may develop the overt disease.

Anti-inflammatory potency of ARISTOCORT was determined by both the asbestos pellet[1] and cottonball[9] tests. It was found to be nine to 10 times more effective than hydrocortisone in this respect.

Gastric acidity and pepsin

The precise mode of ulcerogenesis during treatment with corticosteroids is not known. There is much experimental evidence for believing this may be related to the tendency of these agents to increase gastric pepsin and acidity—and this cannot be abolished by vagotomy, anticholinergic drugs or gastric antral resection.[10] Clinical studies[11] of patients on ARISTOCORT revealed that uropepsin excretion is not elevated. Further, their basal acidity and gastric response to histamine stimulation were within normal limits.

Central nervous system

The tendency of corticosteroids to produce euphoria, nervousness, mental instability, occasional convulsions and psychosis is well known.[12] The mechanism underlying these disturbances is not well understood.

ARISTOCORT, on the contrary, does not produce a false sense of well being, insomnia or tension except in rare instances. In the treatment of 824 patients, for up to one year, not a single case of psychosis has been produced. In general, it appears to maintain psychic equilibrium without producing cerebral stimulation or depression.

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The Promise of Aristocort in Reduction of Side Effects

It is axiomatic to affirm that the undesirable collateral hormone effects of corticosteroids increase in frequency and severity the higher the dosage and the longer used.

It has also become well recognized that the most serious of the major side effects from long-term corticosteroid treatment are peptic ulcers, osteoporosis with fracture, drug psychosis and euphoria, and sodium and water retention leading often to general tissue edema and hypertension.

It is significant that of the close to 400 patients on the lower dosage schedules found effective in bronchial asthma and dermatologic conditions, only 1 case of peptic ulceration has developed. No other of the above side effects have been observed even though ARISTOCORT was administered continuously to them for periods as long as one year.

The treatment of rheumatoid arthritis with steroids appears to result in the highest incidence of side effects. For this reason, the side effects associated with ARISTOCORT therapy in 292 patients with rheumatoid arthritis are below compared to the reported incidence of those from prednisone and prednisolone.

Peptic Ulcer

The most recent study available on the incidence of peptic ulceration in patients with rheumatoid arthritis on long-term prednisone therapy reported 12 ulcers in 49 cases (24 per cent).[1] Lowest incidence of 6.5 per cent has been recorded in a group of patients on this drug for six to nine months.[2] Four of six ulcers, in another series of 39 patients on prednisone,[3] appeared in less than three months of therapy.

The occurrence of peptic ulcer in 292 patients with rheumatoid arthritis treated continuously for up to one year with ARISTOCORT is approximately 1 per cent (2 of the 3 occurred in patients transferred from prednisone). In the remaining 532 cases recently analyzed, only one ulcer has been discovered in a patient who apparently had no ulcer when he was changed from another steroid.

Osteoporosis and Compression Fractures

The incidence of compressed fractures of vertebrae—and to a lesser extent in other bones—is high in patients on prolonged therapy with all previous corticosteroids.[4] One group of 49 patients[1] on long-term prednisone treatment experienced nine vertebral fractures (18 per cent); another series of 39 developed eight fractures (20 per cent),[3] four to 15 months after the beginning of steroid administration.

The occurrence of osteoporosis with compression fracture in 292 patients with rheumatoid arthritis treated continuously for up to one year with ARISTOCORT is 0.33 per cent (1 case[5]). Although these results are encouraging, determination of the true incidence of osteoporosis will have to await the passage of more time.

Euphoria and Psychosis

The euphoria so commonly produced by all previous corticosteroids has seemed a most desirable attribute to patients. In penalty, however, they have often later to pay for this by mental disturbances, varying from mild and transitory to severe depression and psychosis,[4] and toxic syndromes producing even convulsions and death.[6]

Since the onset of these complications is not directly related to duration of steroid administration,[7] the fact that not one case of psychosis occurred in 824 patients treated with ARISTOCORT, is most encouraging.

Sodium Retention—Hypertension—Potassium Depletion

When 17 patients were changed from prednisone to ARISTOCORT, 11 rapidly lost weight although only one had had visible edema.[8] Sodium and water retention, hypokalemia or hyperkalemia and steroid hypertension did not appear in 194 rheumatoid arthritis patients treated with ARISTOCORT.[5,9]

The interrelation between blood and body sodium, and steroid hypertension has long been generally appreciated.[10,11] Except in rare instances, or when unusually high doses are used (e.g., leukemia), the problem of edema and hypertension caused by sodium and water retention, has been eliminated with ARISTOCORT.

Minor Side Effects

Collateral hormonal effects of less serious consequence occurred with approximately the same frequency as with the older corticosteroids.[5] These include erythema, easy bruising, acne, hypertrichosis, hot flashes and vertigo. Several investigators have reported symptoms not previously described as occurring with corticosteroid therapy, e.g., headaches, lightheadedness, tiredness, sleepiness and occasional weakness.

Moon facies and buffalo humping have been seen in some patients on ARISTOCORT. However, ARISTOCORT therapy, in many instances, resulted in diminution of "Cushingoid" signs induced by prior therapy. Where this occurs, it may be related to reduced dosage on which patients can be maintained.

Reduction of dosage by one-third to one-half

In a double-blind study of comparative dosage in patients with rheumatoid arthritis,[12] 70 per cent of the cases were as well controlled on a dose of ARISTOCORT one-half that of prednisone. A general recommendation can be made that ARISTOCORT be used in doses two-thirds that of prednisone or prednisolone in the treatment of rheumatoid arthritis. There are individual variations, however, and each patient should be carefully titrated to produce the desired amount of disease suppression.

Comparative studies, of patients changed from prednisone, indicate reduced dosage of ARISTOCORT in bronchial asthma and allergic rhinitis (33 per cent),[8] and in inflammatory and allergic skin diseases (33-50 per cent).[13,14]

General Precautions and Contraindications

Administration of ARISTOCORT has resulted in a lower incidence of the major serious side effects, and in fewer of the troublesome minor side effects known to occur with all previously available corticosteroids. However, since it is a highly potent glucocorticoid, with profound metabolic effects, all traditional contraindications to corticosteroid therapy should be observed.

No precautions are necessary in regard to dietary restriction of sodium or supplementation with potassium.

Since ARISTOCORT has less of the traditional side effects, the appearance of sodium and water retention, potassium depletion, or steroid hypertension cannot be used as signs of overdosage. As a rule patients will lose some weight during the first few days of treatment as a result of urinary output, but then the weight levels off.

Patients do not develop the abnormally voracious appetite common to previous corticosteroid administration. In fact, some patients experienced anorexia, and it is advisable to inform patients of this and to recommend they maintain a normal intake of food, with emphasis on liberal protein intake.

While precipitation of diabetes, peptic ulcer, osteoporosis, and psychosis can be expected to appear rarely from ARISTOCORT, they must be searched for periodically in patients on long-term steroid therapy.

Traditional precautions should be observed in gradually discontinuing therapy, in meeting the increased stress of operation, injury and shock, and in the development of intercurrent infection.

There is one overriding principle to be observed in the treatment of any disease with ARISTOCORT. *The amount of the drug used should be carefully titrated to find the smallest possible dose which will suppress symptoms.*

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Lederle

The Promise of Aristocort in Rheumatoid Arthritis

ARISTOCORT *therapy has been intensely and extensively studied for periods up to one year on 292 patients with rheumatoid arthritis.*

Significant is the fact that most patients were *severe* arthritics, transferred to ARISTOCORT from other corticosteroids because satisfactory remission had not been attained, or because the seriousness of collateral hormonal effects had made discontinuance desirable.

Results of treatment

Freyberg and associates[1] treated 89 patients with rheumatoid arthritis (A. R. A. Class II or III and Stage II or III). Of these, 51 were on ARISTOCORT therapy from three to over 10 months. In all but a few patients, satisfactory suppression of rheumatoid activity was obtained with 10 mg. per day. Thirteen were controlled on 6 mg. or less a day, and for periods to 180 days. The investigators reported therapeutic effect in most cases to be A. R. A. Grade II (impressive) and that marked reduction in sedimentation rates occurred.

Another interesting observation in this study: Of the 89 patients treated, 12 had active ulcers, developed from prior steroid therapy. *In six patients, the ulcers healed while on doses of* ARISTOCORT *sufficient to control arthritic symptoms.*

Hartung[2] treated 67 cases of rheumatoid arthritis for up to 10 months. He found the optimum maintenance dose to be 11 mg. per day. Nineteen of these patients were treated for six to 10 months with an "excellent" therapeutic response.

Dosage and course of therapy

The initial dosage range recommended is 14 to 20 mg. per day—depending on the severity and acuteness of signs and symptoms. Dosage is divided into four parts and given with meals and at bedtime. Anti-rheumatic effect may be evident as early as eight hours, and full response often obtained within 24 hours. This dosage schedule should be continued for two or three days, or until all acute manifestations of the disease have subsided, whichever is later.

The maintenance level is arrived at by reduction of the total daily dosage in decrements of 2 mg. every three days. The range of maintenance therapy has been found to be from 2 mg. to 15 mg. per day—with only a very occasional patient requiring as much as 20 mg. per day. Patients requiring more than this should not be long continued on steroid therapy.

The aim of corticosteroid therapy in rheumatoid arthritis is to suppress the disease only to the stage which will enable the patient to carry out the required activities of normal living or to obtain reasonable comfort. The maintenance dose of ARISTOCORT to achieve this end is arrived at while making full use of all other established methods of controlling the disease.

ARISTOCORT is available in 2 mg. scored tablets (pink); 4 mg. scored tablets (white). Bottles of 30.

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an orally effective nonmercurial agent with diuretic activity equivalent to that of the parenteral mercurials

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5. Cirrhosis with ascites
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Provides basic therapy to improve and simplify the management of hypertension

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smoothes out blood pressure fluctuations[1,2]

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Supplied: 250 mg. and 500 mg. scored tablets 'DIURIL' (chlorothiazide), bottles of 100 and 1000.

References

1. Hollander, William, and Wilkins, Robert W.: Chlorothiazide: A New Type of Drug for the Treatment of Arterial Hypertension, Boston Medical Quarterly *8*:69 (Sept.) 1957.

2. Freis, Edward D., and Wilson, Ilse M.: Potentiating Effect of Chlorothiazide (DIURIL) in Combination with Antihypertensive Agents, a Preliminary Report; Med. Annals of the District of Columbia *26*:468 (Sept.) 1957.

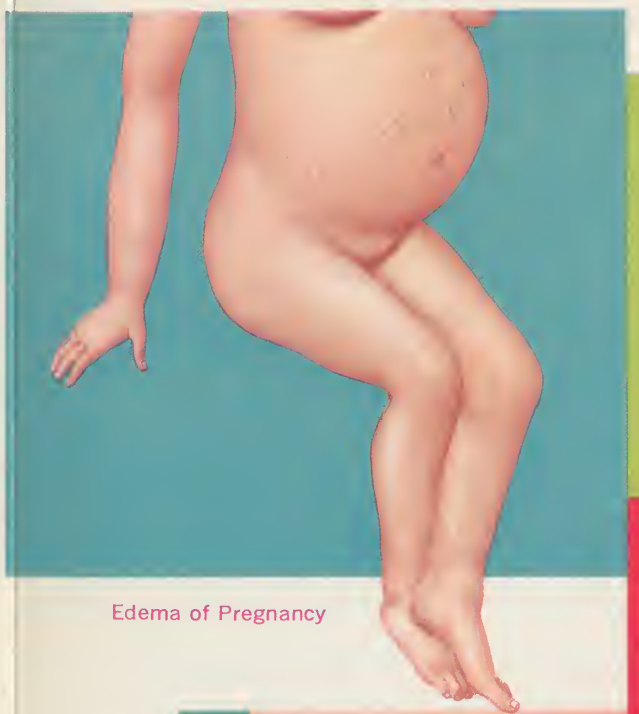
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REFERENCES:

1. Moyer, J.H., Ford, R.V., and Spurr, C.L.: Pharmacodynamics of Chlorothiazide (Diuril), An Orally Effective Non-Mercurial Diuretic Agent, Proc. Soc. Exper. Biol. and Med. *95*:529 (July) 1957.

2. Ford, Ralph V., Handley, Carroll, Moyer, John H., and Spurr, Charles L.: Chlorothiazide, An Orally Effective Non-Mercurial Diuretic Agent, Med. Rec. and Ann. *51*:376 (April) 1957.

Markle Foundation Grant Awarded to Dr. Falkner

Frank Falkner, M.D., of the University of Louisville School of Medicine, is one of 25 teachers and investigators in U. S. and Canadian medical schools to receive a portion of the $750,000 in grants given by the Markle Foundation in 1956-7 to continue its Scholar in Medical Science Program.

The appropriation raises the total for Scholar Grants in the past ten years to above $6,000,000 with over 200 aided. Beverly T. Towery, M.D., of the University of Louisville School of Medicine, received a grant from the Foundation in 1949.

Charles Farnsley, Louisville attorney, has served on the Scholar committee since the program began in 1948. Philip Davidson, Ph.D., President of the University of Louisville, has also served on the committee.

Three Named Fellows of ACP

Allen Lee Cornish, M.D., Lloyd Dewald Mayer, M.D., both of Lexington, and Solomon J. Rosenberg, M.D., Louisville, were named Fellows of the American College of Physicians at a meeting of the College's Board of Regents in Philadelphia on November 9-10.

Five Kentucky physicians were named Associates of the College at the meeting. They include: Foster Douglas Coleman, Louisville; Irving F. Kanner, Lexington; William Petrie Hall and Charles Pittman Orr, Paducah; and Harold J. Schupbach, Owensboro.

Library Committee Enlists Members

Members of the Louisville Medical Library Committee are enlisting new members to aid in building a finer medical library in Louisville.

According to S. I. Kornhauser, M. D., Louisville, chairman of the Committee, the library is the only well established source of medical literature in Kentucky. Totals from previous drives were: 1955, $1,285; 1956, $1,835; and 1957, $2,460. Checks should be made out to the Louisville Medical Library, and sent to Harry A. Lehman, Executive Secretary, Jefferson County Medical Society, 1169 Eastern Parkway, Louisville 17, Kentucky.

Dr. Steigman at Honolulu Hospital

Alex J. Steigman, M.D., Chairman of the Department of Pediatrics at the University of Louisville School of Medicine, is spending three months as Visiting Director of Professional Education at the Kauikelolani Children's Hospital, Honolulu. Doctor Steigman is expected to return early in March. During his absence Katharine Dodd, M.D., professor emeritus, will be acting head of the Department of Pediatrics at the U of L.

Louisville Surgical Society Elects

George Sehlinger, M. D., was elected president of the Louisville Surgical Society to succeed James Drye, M. D., on December 11, at a meeting at the Pendennis Club. W. McDaniel Ewing, M. D., was elected vice president and J. Luther Fuller and Houston Shaw, M. D. were named to the executive committee.

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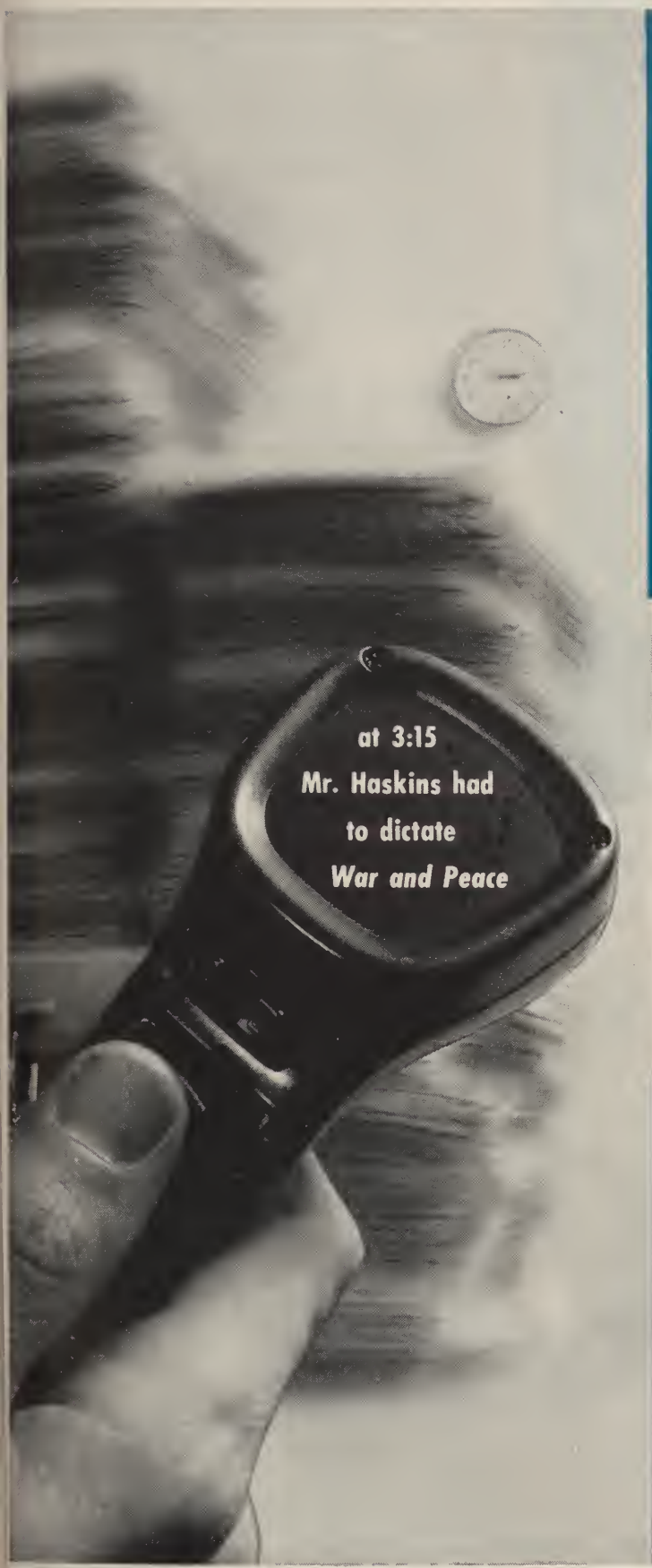
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U. K. Center Receives Fed. Grant

The Federal Government has apparently approved a request for $9 million to aid in building the new Albert B. Chandler Medical Center at the University of Kentucky, according to Russell E. Teague, M. D., State Health Commissioner.

The Department of Health, Education and Welfare recently allotted more than $1 million to the project and said that a similar amount would be allocated in the future toward the center, which Doctor Teague said would indicate to him approval of the whole plan. Separate applications for federal aid totalling $9 million were made by the State Health Department.

Frehling Research Fund Formed

Nineteen physicians and 11 other Louisvillians have formed the Joseph M. Frehling Medical Research Foundation in memory of Doctor Frehling. Louisville surgeon, who died on November 1.

The fund will be used to build a research laboratory in the Medical Center. It is expected that the Center will work closely with Jewish Hospital and the University of Louisville Medical School. Emphasis in the research program will probably be on surgery.

Tynes on Blue Cross Board

D. Lane Tynes, executive director of Blue Cross-Blue Shield of Kentucky, has been named to the Board of Governors of the Blue Cross Association, national coordinating agency for the enrollment and handling of national accounts for the Blue Cross plans.

Through this agency, inter-state employers may have a standardized plan for their employees in all states, or may arrange to have the benefits and rates which are offered by the local Blue Cross plans in their various localities.

Offer Loans for Chest Disease Study

To stimulate interest in postgraduate study of chest diseases, the American College of Chest Physicians is offering loans at a maximum of $1,000 per person yearly to assist worthy postgraduate students in continuation of studies of diseases of the chest.

Any person who has completed an internship of one year or more in an acceptable hospital is eligible to apply for a loan. The yearly loan amount to one person may not exceed $1,000, nor may more than a total of $3,000 be loaned to one person. For further imformation on the loan plan, interested applicants should write to the Resident Loan Fund Committee, American College of Chest Physicians, 112 Chestnut St., Chicago 11, Illinois.

Receives $15,000 for Eye Research

The Ophthalmology Department of the University of Louisville School of Medicine recently received a $15,000 check for research work from the Knights Templar Eye Foundation in New York, according to C. Dwight Townes, M. D., who said the gift would be used for the study of the eye's vitreous humor.

Health Insurance Institute Predicts 123 Million Insured

The Health Insurance Institute predicts that by December 31, 1957 over 123 million people in the U. S. will be protected by some form of health insurance designed to help pay hospital, doctor or other medical bills.

This figure represents close to 75 per cent of the total U. S. civilian population. Breaking down the national totals on health insurance coverage for 1957, an estimated 109 million persons will be covered against major medical expenses, and 43 million for loss of income coverage, in addition to the 123 million protected against the cost of hospital bills. Biggest growth in the type of coverage in recent years has been major medical insurance.

Total health insurance benefits paid out this year by insurance companies, Blue Cross-Blue Shield and miscellaneous plans, will amount to an estimated $4.2 billion as compared to $3.6 billion in 1956, the Institute said.

Writing and Editing Help Offered

A student at the University of Louisville Medical School who is well trained in English and has a background of training in journalism is offering his services to members of the profession in Kentucky who would like assistance in writing medical papers or help in editing them. He is using the service as a means of part time employment to further his medical education. If interested, please contact David Collins, 947 South Brook St., Louisville, or call JUniper 3-6154.

PRESIDENT'S PAGE

(Continued from Page 14)

individual. It is the duty of the State to protect these rights. The Socialistic and Communistic State fail in their duties, and the rights of the individual are unjustly abolished.

William Tyler Page in the American Creed states:

"I believe in the United States of America as a government of the people, by the people, for the people, whose just powers are derived from the consent of the governed; a democracy in a Republic; a sovereign nation of many sovereign States; a perfect Union, one and inseparable; established upon those principles of freedom, equality, justice, and humanity for which American patriots sacrificed their lives and fortunes.

I, therefore, believe it is my duty to my country to love it, to support its Constitution, to obey its laws, to respect its Flag, and to defend it against all enemies."

Socialism and Communism are our enemies.

PUBLIC HEALTH PAGE

(Continued from Page 22)

tion of $3,033,000 for the fiscal year 1958-59 and $4,059,000 for the fiscal year 1959-60, to match an equal amount of Federal money, is recommended. If this sum cannot be provided, then, because the need is urgent, a smaller amount should be appropriated, and the recommended organization established. Not only would this lay a solid foundation for further development of the program, but it would mean that much invaluable experience and momentum will be gained which otherwise will be lost.

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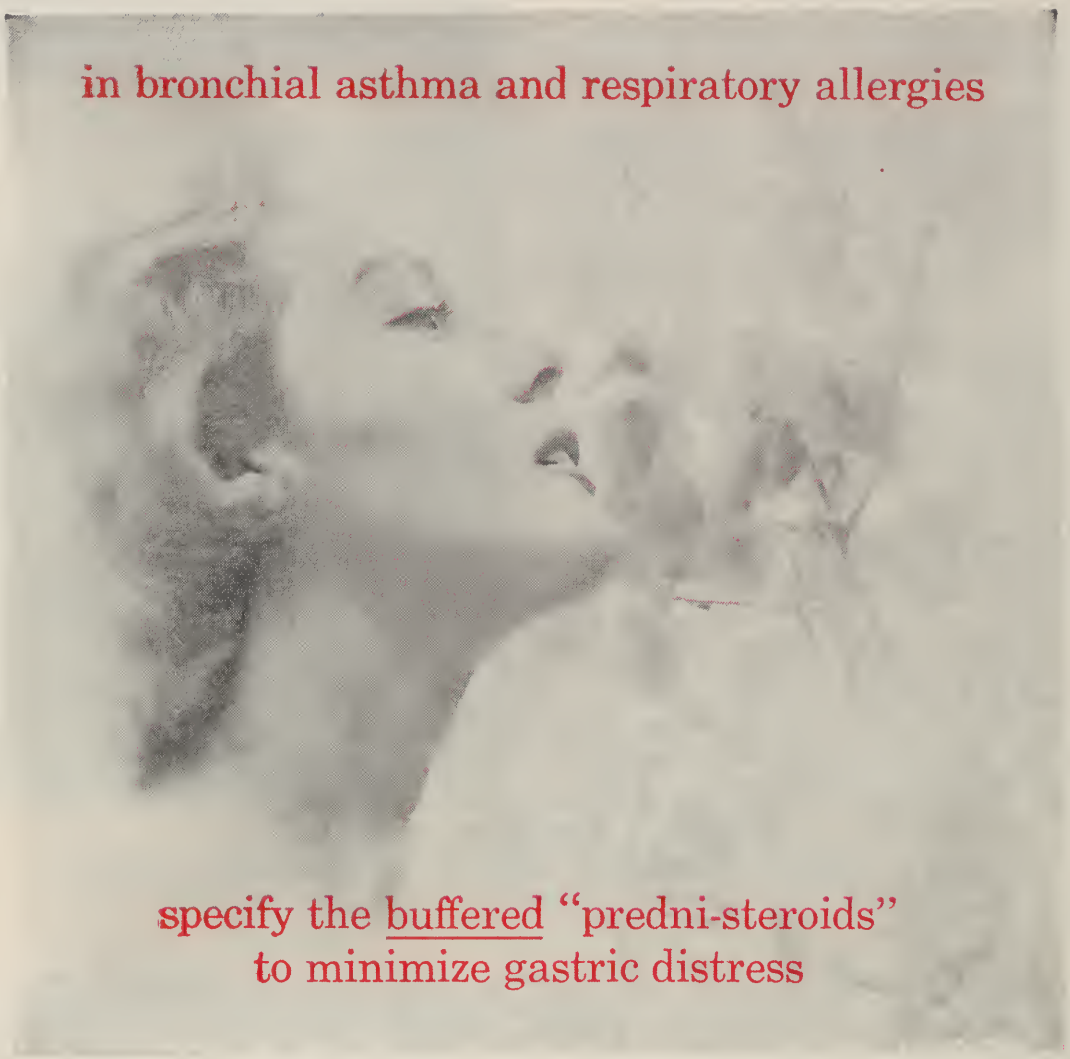
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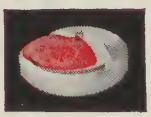
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Health Information Foundation Conducts Health Ins. Survey

The Health Information Foundation has announced that this year it will sponsor and jointly conduct with the National Opinion Research Center of the University of Chicago another nationwide survey of medical costs and voluntary health insurance coverage.

A grant of $167,000 was approved for the new study at a recent meeting of the Foundation's Executive Committee. The new study will resurvey the study of 1953 which provided basic health insurance data.

It is expected that the 1958 survey will show the great improvement in voluntary health insurance coverage since 1953. George Bugbee, Foundation president said, "Since 1953 enrollment in voluntary health insurance has increased from 58 per cent of the American population to more than 70 per cent.

Patients in State Hosps. Decrease

Listings of the "movement of hospital population" in Kentucky's four state mental hospitals for September and October show a gain in the number of those discharged from the hospital and a decrease in those admitted to the hospital, according to Harold L. McPheeters, M. D., state director of Mental Health.

Total of those admitted in October was 282, as compared to 294 in September. Discharges in October totalled 165, while in September there were only 130. Total number of patients in the hospital in October was 7260—a decrease of 45 from September when the total was 7305.

Doctors Work on Hosp. Drive

J. B. Lukins, M. D., and Sam A. Overstreet, M. D., are serving as co-chairmen of the Doctor's Division of the forthcoming drive to raise $2,000,000 for the new $5,000,000 Methodist-Evangelical Hospital in Louisville.

They have appointed 14 physicians as vice-chairmen to serve as a steering committee and heads of teams of five doctors each. They are: F. D. Coleman, David Cox, Robert S. Dyer, W. McDaniel Ewing, K. Armand Fischer, J. R. Flautt, Jr., John Gordinier, D. P. Hall, Arthur Kasey, Arthur H. Keeney, Lanier Lukins, Henry G. Saam, Frank and John Stites.

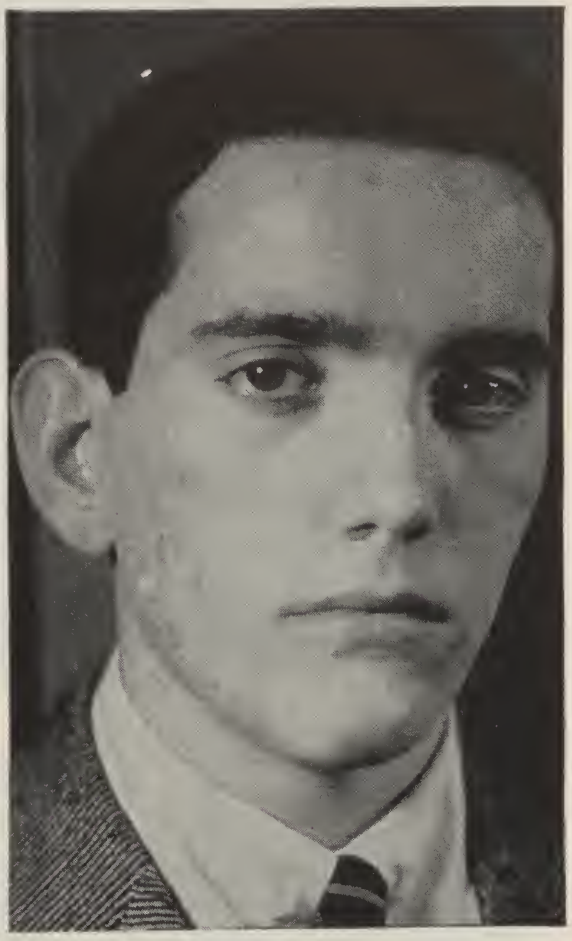
Dr. Scott Heads Research Society

Thornton Scott, M.D., Lexington, newly elected president of the Central Society of Clinical Research, received the president's gavel of the organization from his father, John W. Scott, M.D., a charter member of the society, in Chicago on November 1. The society is made up of physicians actively interested in research problems associated with clinical medicine. There are 340 active members, 250 emeritus, and 57 adjunct members.

Dr. Lull is AMEF President

George F. Lull, M. D., AMA Secretary-General Manager, was named president of the American Medical Education Foundation at a meeting of its board of Directors in Philadelphia on December 4. He succeeds Louis W. Bauer, M. D., of Hempstead, New York.

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ACHROSTATIN V CAPSULES contain 250 mg. tetracycline HCl equivalent (phosphate-buffered) and 250,000 units Nystatin.

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Basic oral dosage (6-7 mg. per lb. body weight per day) in the average adult is 4 capsules of ACHROSTATIN V per day, equivalent to 1 Gm. of ACHROMYCIN V.

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In Memoriam

JOHN H. CHRISMAN, M. D.
Owenton
1870-1957

John H. Chrisman, M. D., believed to be the last living graduate of the University of Louisville School of Medicine Class of 1892, died at his home in Owenton on December 6.

Doctor Chrisman started practice in Jonesville in 1892. Nine years later he took a year of post-graduate study in Louisville and then returned to Owen County where he had practiced for the past 55 years. He served as a captain in the Army Medical Corps during World War I.

R. B. KIRKPATRICK, M. D.
Abilene, Texas
1885-1957

R. B. Kirkpatrick, M. D., who practiced medicine in Paducah for about 15 years before moving to Texas in 1928, died at his home in Abilene, Texas on December 2.

He graduated from the University of Louisville Medical School in 1914. Doctor Kirkpatrick, who was 72 when he died, had practiced in Texas until about six months ago.

JOHN ERWIN EDWARDS, M.D.
Lancaster
1885-1957

John Erwin Edwards, M.D., retired physician, died at his home in Lancaster on November 27.

A native of Mars Hill, North Carolina, Doctor Edwards graduated from the University of Louisville School of Medicine. He started practicing medicine at Buckeye, Garrard County, in 1916. After serving in World War I, he came to Lancaster in 1919.

I. T. FUGATE, M.D.
Louisville
1881-1957

I. T. Fugate, M.D., a Louisville radiologist, died of a heart attack at his home on December 4.

Doctor Fugate, who was a past president of the Jefferson County Medical Society, graduated from the University of Louisville School of Medicine in 1910. He practiced two years in West Virginia before returning to Louisville.

CHARLES M. PETTY, M. D.
Independence
1866-1957

Charles M. Petty, M. D., who had practiced in Kenton County for 61 years, died on December 3 at Booth Hospital in Covington.

A graduate of the Medical College of Ohio in 1895, Doctor Petty had practiced in the Independence and Nicholson areas of Kenton County. He retired once briefly, but soon returned to practice.

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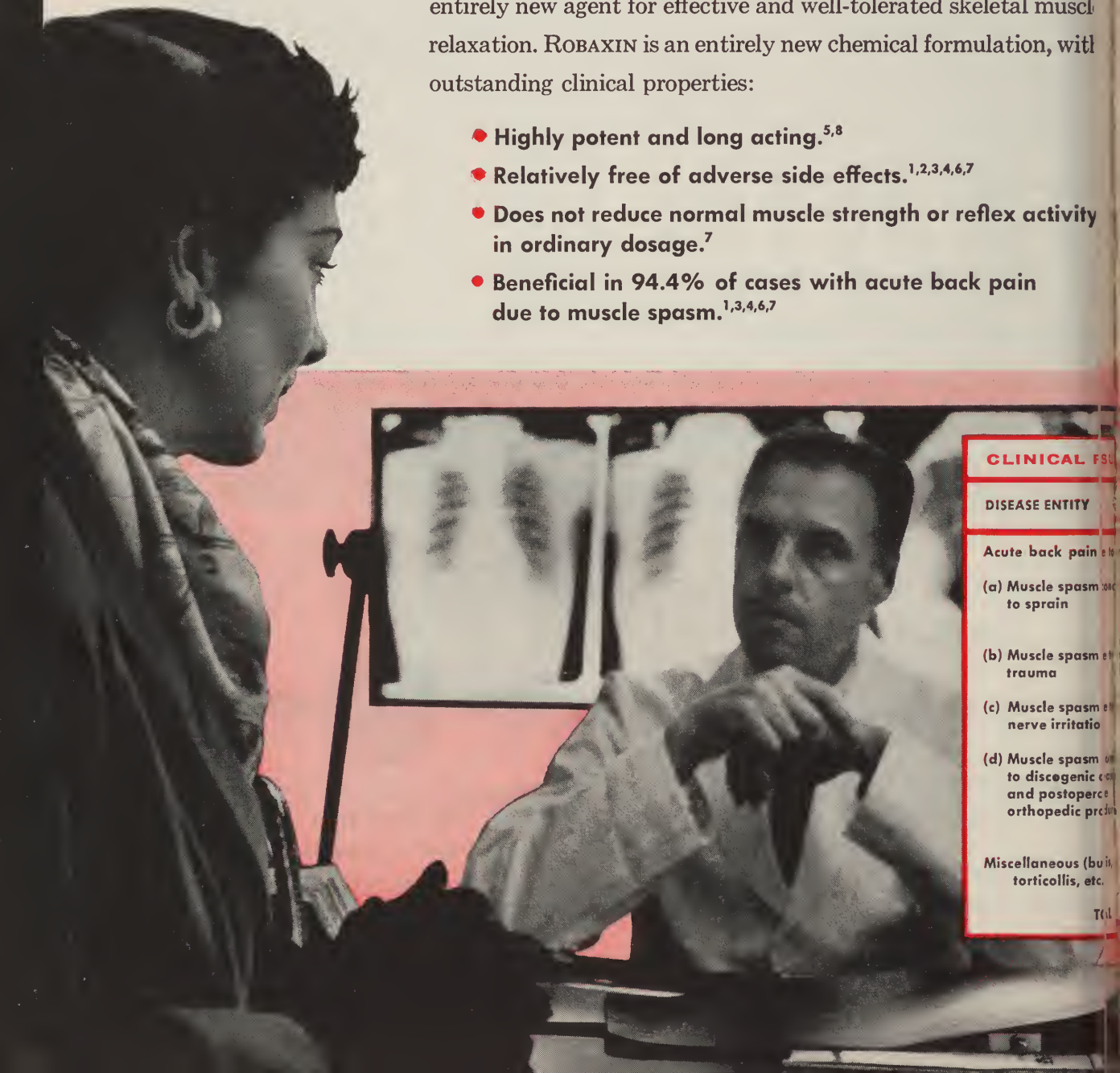
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- **Beneficial in 94.4% of cases with acute back pain due to muscle spasm.**[1,3,4,6,7]





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OBAXIN IN ACUTE BACK PAIN[1,3,4,6,7]

IRATION OF EATMENT	DOSE PER DAY (divided)	RESPONSE marked	mod.	slight	neg.	SIDE EFFECTS
42 days	3-6 Gm.	17	1	0	0	None, 16 Dizziness, 1 Slight nausea, 1
42 days	2-6 Gm.	8	1	3	1	None, 12 Nervousness, 1
240 days	2.25-6 Gm.	4	1	0	0	None, 5
28 days	1.5-9 Gm.	24	3	0	3	None, 25 Dizziness, 1 Lightheadedness, 2 Nausea, 2 *
60 days	4-8 Gm.	6	0	0	0	None, 6
		59	6	3	4	*Relieved on reduction of dose

References: 1. Carpenter, E. B.: Publication pending. 2. Carter, C. H.: Personal communication. 3. Forsyth, H. F.: Publication pending. 4. Freund, J.: Personal communication. 5. Morgan, A. M., Truitt, E. B., Jr., and Little, J. M.: American Pharm. Assn. 46:374, 1957. 6. Nachman, H. M.: Personal communication. 7. O'Doherty, D.: Publication pending. 8. Truitt, E. B., Jr., and Little, J. M.: J. Pharm. & Exper. Therap. 119:161, 1957.

Indications – Acute back pain associated with: (a) muscle spasm secondary to sprain; (b) muscle spasm due to trauma; (c) muscle spasm due to nerve irritation; (d) muscle spasm secondary to discogenic disease and postoperative orthopedic procedures; and miscellaneous conditions, such as bursitis, fibrositis, torticollis, etc.

Dosage – Adults: Two tablets 4 times daily to 3 tablets every 4 hours. Total daily dosage: 4 to 9 Gm. in divided doses.

Precautions – There are no specific contraindications to Robaxin and untoward reactions are not to be anticipated. Minor side effects such as lightheadedness, dizziness, nausea may occur rarely in patients with unusual sensitivity to drugs, but disappear on reduction of dosage. When therapy is prolonged routine white blood cell counts should be made since some decrease was noted in 3 patients out of a group of 72 who had received the drug for periods of 30 days or longer.

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IN MEMORIAM

(Continued from Page 79)

J. D. ROLLINGS, M. D.
LaCenter
1861-1957

J. D. Rollings, M. D., a founder of the town of LaCenter in 1902, died at his home in that town on December 6 at the age of 96.

Doctor Rollings, who practiced medicine for 48 years before retiring in 1930 to devote his time to farming and livestock, graduated from the Louisville Medical School in 1882. He was a past president of the Ballard County Medical Society.

JOHN McGARVEY PREWITT
Mount Sterling
1883-1957

John M. Prewitt, M.D., a graduate of the University of Louisville School of Medicine in 1907, died on December 3 after an illness of eight months.

Doctor Prewitt, who had retired from active practice at the time of his death, practiced in Covington until 1924 when he came to Mt. Sterling. A World War I veteran, he was a local historian and member of the Lexington Civil War roundtable.

CLAUDE M. DUNLAP
Lexington
1901-1957

Claude M. Dunlap, M. D., a psychiatrist on the staff of Eastern State Hospital since 1952, died on December 2 following a short illness.

A native of Charleston, West Virginia, he was graduated from the University of Virginia School of Medicine at Richmond in 1930. He was a member of the Kentucky State Psychiatric Society.

LYMAN THAYER, M.D.
Paris
1893-1957

Lyman Irving Thayer, M.D., 64, of the Paris State TB Hospital, died at the Methodist Hospital at Rochester, Minnesota, on November 11.

A native of New York, he had been assistant medical director of the District 3 State TB Hospital for the past four years. He suffered a heart attack about a month before his death, while going through the Mayo Clinic and had been hospitalized since. Doctor Thayer was a graduate of the Columbia University College of Physicians and Surgeons in 1920.

AMA Plans Legal Conference

Legal problems currently facing individual physicians and organized medicine will be the primary discussion topics at the second AMA sponsored meeting for state and county society executive secretaries and attorneys at the Drake Hotel in Chicago on May 9-10. The AMA Law Department will welcome suggestions from state and country societies on specific legal subjects that would be of most interest to them. The first meeting, which was also sponsored by AMA's law department, was held in April, 1956.

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County Society Reports

Muhlenberg

Officers for the coming year were elected at the November meeting of the Muhlenberg County Medical Society, according to G. F. Brockman, M. D., Society secretary.

Other officers elected include: H. H. Woodson, M. D., Greenville, president; R. E. Davis, M. D., Central City; vice president; G. L. Simpson, M. D., Greenville, delegate to the KSMA; G. F. Brockman, M. D., Greenville, alternate delegate to the KSMA; and J. P. Walton, M. D., Central City, censor. Plans were made for entertaining legislators at a dinner meeting in December.

McCracken

The monthly meeting of the McCracken County Medical Society was held in Paducah on October 23 with C. P. Orr, M. D., presiding.

Discussion at the meeting included, possible legislation to be sponsored by the Association at the 1958 general assembly, health education programs, the enrollment campaign of Blue Cross-Blue Shield, and the reporting of flu cases to the Health Department. Doctor Orr appointed Vernon D. Pettit, M. D., secretary of the Society, and Samuel L. French, M. D., to the Library Committee.

McCracken

"Medical Management of Ulcerative Diseases of the Stomach and Duodenum," was the subject of a talk by George W. Pedigo, M. D., Louisville in the scientific portion of a meeting of the McCracken County Medical Society in Paducah on November 20.

C. P. Orr, M. D., presided over the meeting which included discussions of pediatric films for use in local television programs, current national and state legislation, and the announcement of the appointment of Harold D. Priddle, M. D., to fill out the unexpired term of James A. Ward, M. D., on the McCracken County Board of Health. It was agreed that the county's state legislators should be invited to the December meeting of the society.

News Items

Wesley G. Farnsley, M. D., has become associated with Jesshill Love, M. D. in the practice of radiotherapy at St. Joseph's Infirmary and in the Medical Arts Building in Louisville. A graduate of the University of Louisville in 1953, Doctor Farnsley interned and took part of his residency training at St. Joseph's. He also took 1½ years of his residency training at the M. D. Anderson Hospital at the University of Texas in Houston.

E. D. Piatt, M. D., who will limit his practice to internal medicine and diseases of the heart, has opened an office in Winchester. A graduate of Harvard Medical School in 1950, he interned and took his residency training at Charity Hospital in New Orleans, Louisiana. He had practiced in Louisiana, before coming to Winchester.

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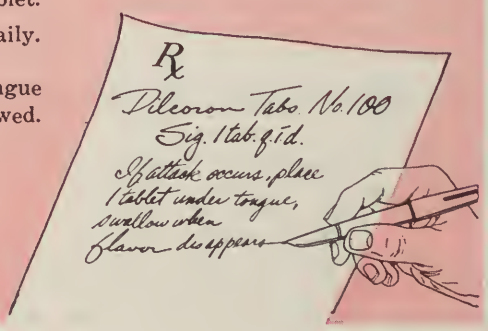


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1. Waldman, S., and Pelner, L.: Am. Pract. & Digest Treat. *8*:1075 (July) 1957.

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"Surgical Treatment of Coronary Artery Disease"

ORMAND C. JULIAN, M.D., Associate Professor of Surgery, University of Illinois School of Medicine, Chicago, Ill.

"Medical Management of Patients with Coronary Disease"

WILLIAM DOCK, M.D., Professor of Medicine, State University of New York Downstate Medical Center, Brooklyn, N. Y.

"Cine-cardioangiography in the Diagnosis of Congenital and Acquired Heart Disease"

F. MASON SONES, JR., M.D., Department of Cardiovascular Diseases, Cleveland Clinic, Cleveland, Ohio.

"Heart Disease in Pregnancy"

JAMES METCALFE, M.D., Harvard University and Boston Lying-in Hospital, Boston, Mass.

"Clinical Aspects and Treatment of Congestive Heart Failure"

E. HUGH LUCKEY, M.D., Professor of Medicine, Chairman of Department, Cornell University Medical College, New York, N. Y.

Saturday, March 8

"Physiology of Hypertension"

G. E. WAKERLIN, M.D., Professor and Head, Department of Physiology, University of Illinois School of Medicine, Chicago, Ill.

"The Practical Management of Hypertension"

EDWARD D. FREIS, M.D., Chief, Medical Service, Veterans' Administration Hospital, Washington D. C.

"Electrolyte Balance and Congestive Heart Failure"

WILLIAM B. SCHWARTZ, M.D., Associate Professor of Medicine, Tufts University School of Medicine, Boston, Mass.

"Electrocardiography"

G. E. BURCH, M.D.
Henderson Professor and Chairman, Department of Medicine, Tulane University School of Medicine, New Orleans, Louisiana.

"Auscultation of the Heart"

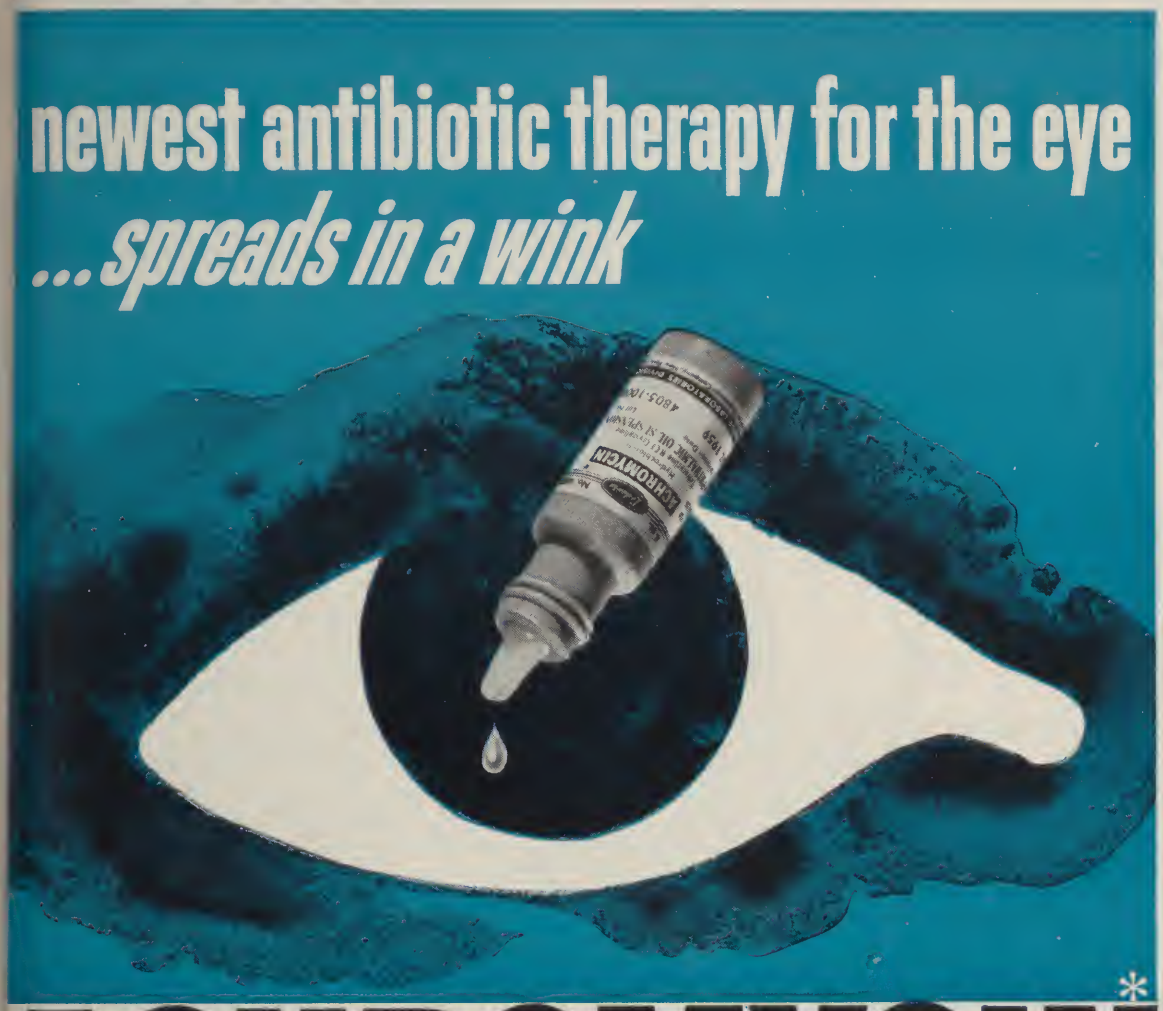
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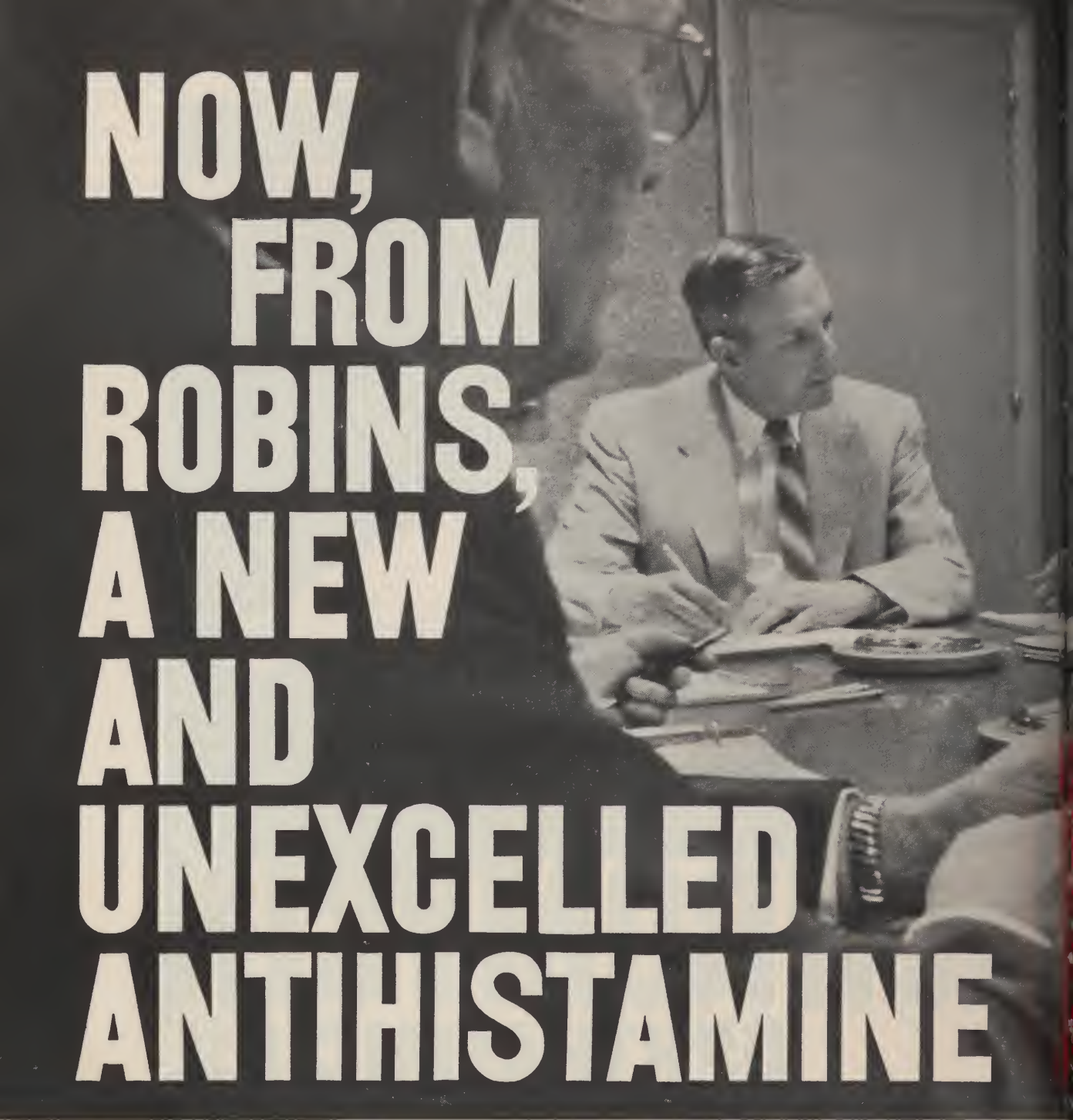
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Allergic dermatitis	2		1	1		Slight Drowsiness
Bronchial asthma	1		1			
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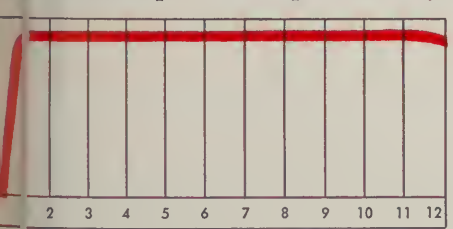
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Robert C. Long, 806 Heyburn Building, Louisville (Alternate)	1958
W. Vinson Pierce, 33 East 7th Street, Covington	1959
Foster D. Coleman, 920 Brown Building, Louisville (Alternate)	1959

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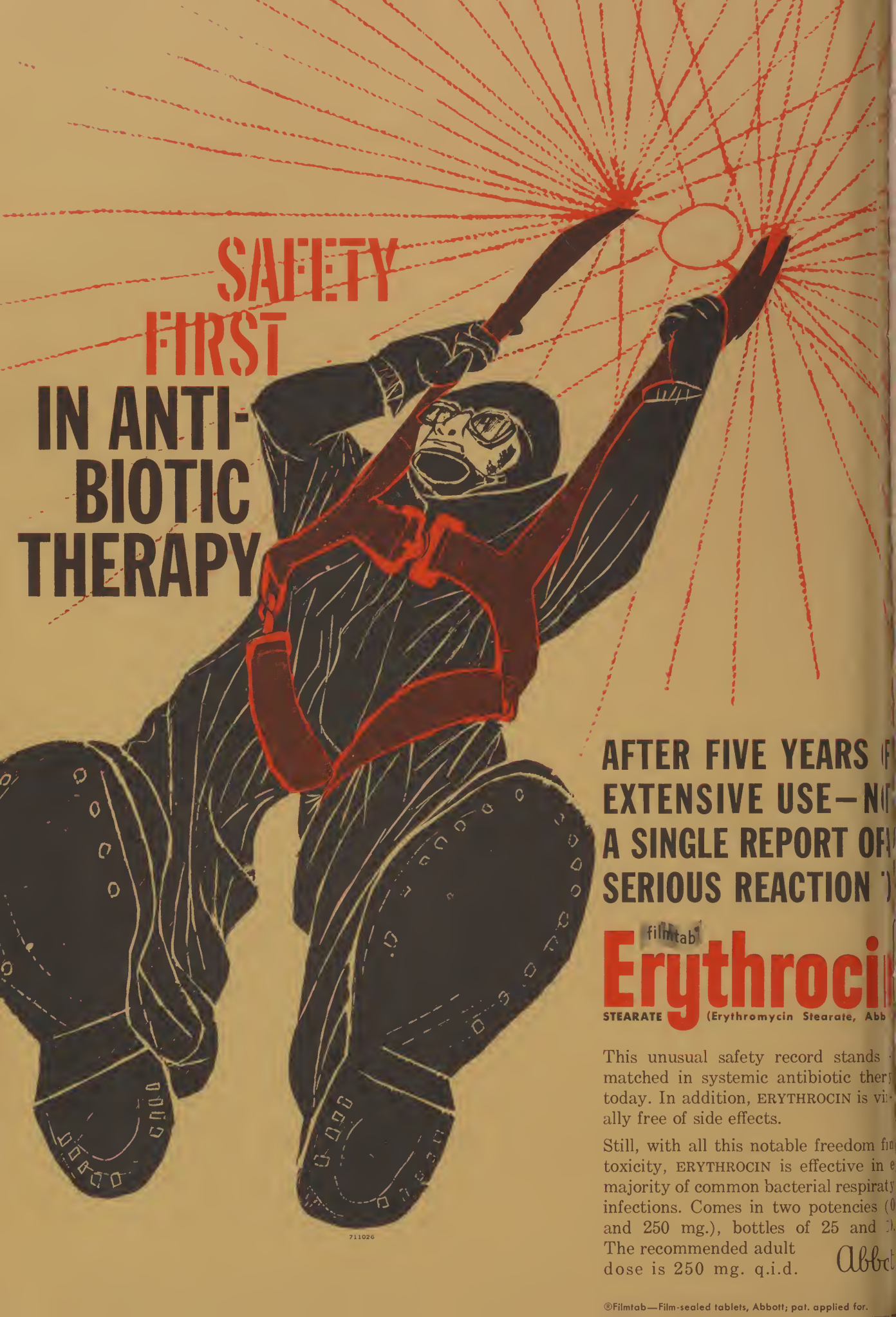
		Term Expires
First District	J. Vernon Pace, 709-10 Citizens Bank Building, Paducah	1959
Second District	Walter L. O'Nan, 700 North Elm, Henderson	1958
Third District	Ralph D. Lynn, Elkton	1959
Fourth District	W. Keith Crume, Bardstown	1959
Fifth District	Carlisle Morse, 3612 Lexington Road, Louisville	1960
Sixth District	John P. Glenn, Russellville	1960
Seventh District	Branham B. Baughman, 401 West Main, Frankfort	1958
Eighth District	Norman Adair, 630 Scott Street, Covington	1960
Ninth District	J. M. Stevenson, Brooksville	1958
Tenth District	J. Farra Van Meter, 183 North Upper Street, Lexington	1958
Eleventh District	Joe M. Bush, Mt. Sterling	1960
Twelfth District	Garnett J. Sweeney, Liberty	1959
Thirteenth District	Charles B. Johnson, Russell	1958
Fourteenth District	Charles C. Rutledge, Hazard	1959
Fifteenth District	Keith P. Smith, Corbin	1960

BUYERS GUIDE

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Source—Race, G. A.; Scheifley, C. H., and Edwards, J. E.: Circulation *13*:329, 1956.

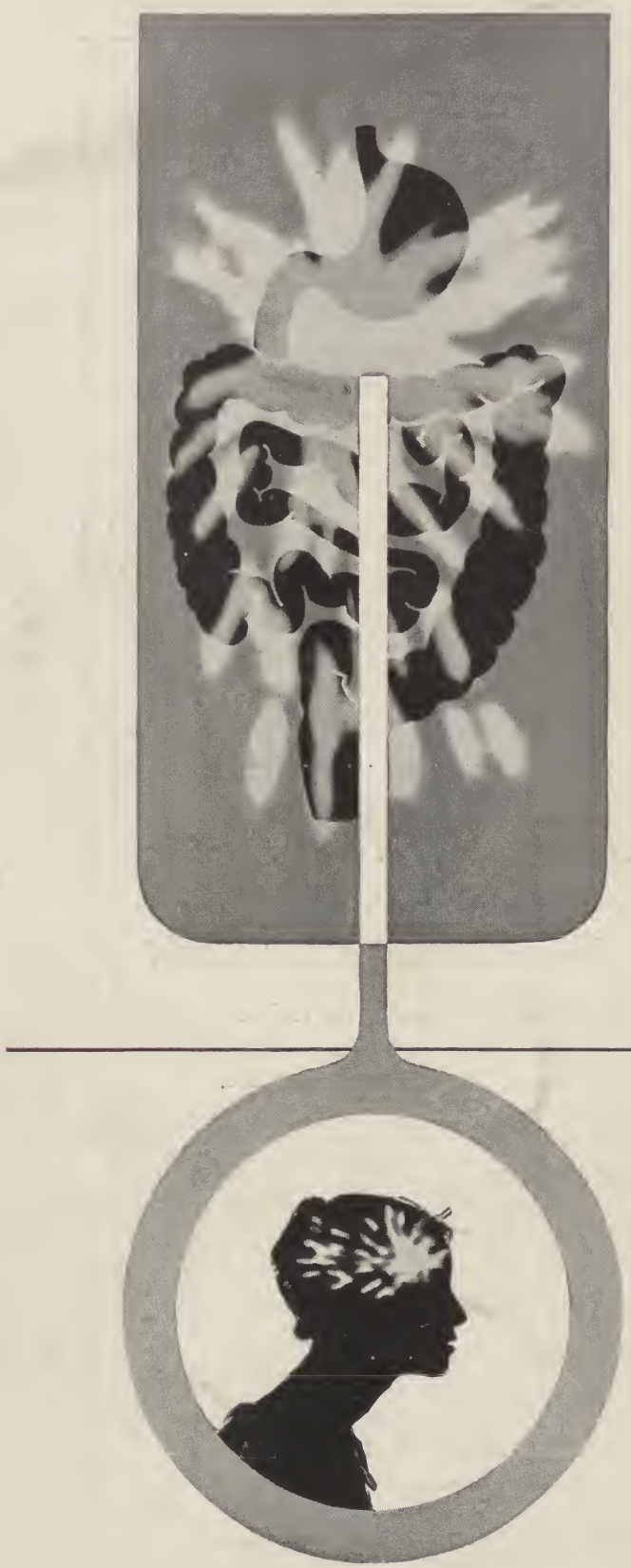
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The National Eye Bank

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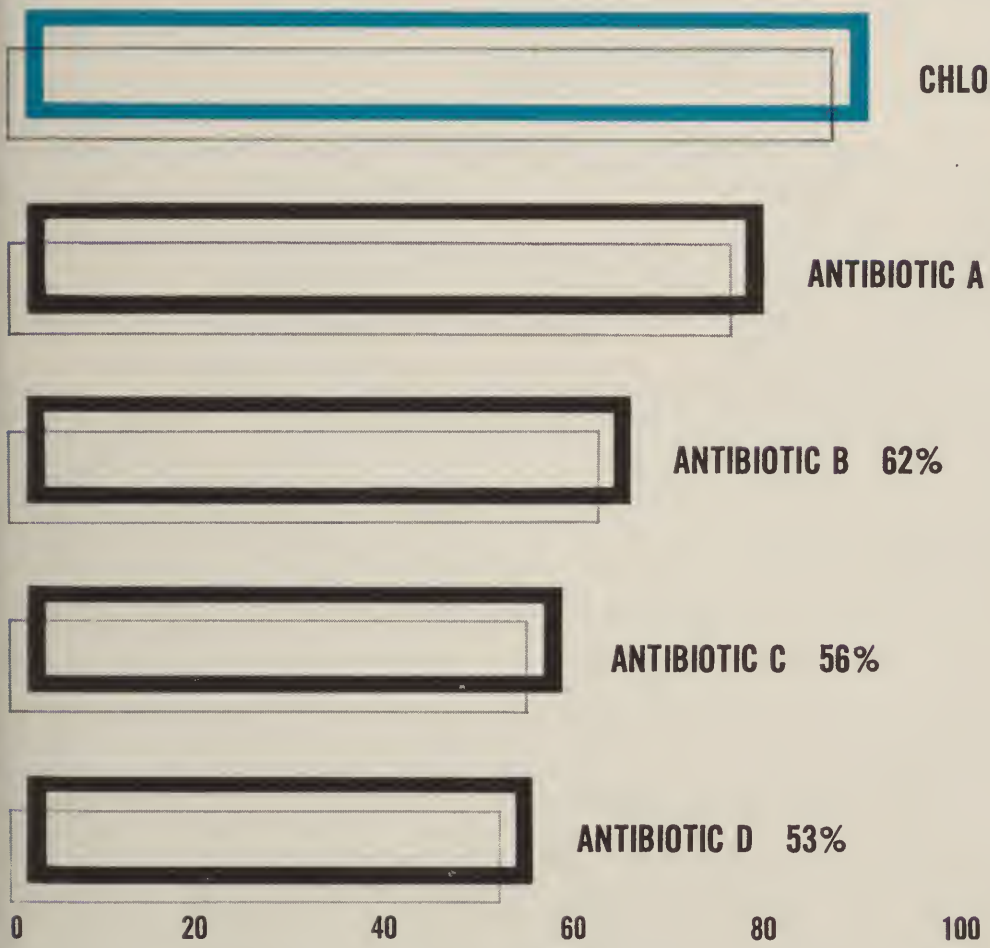
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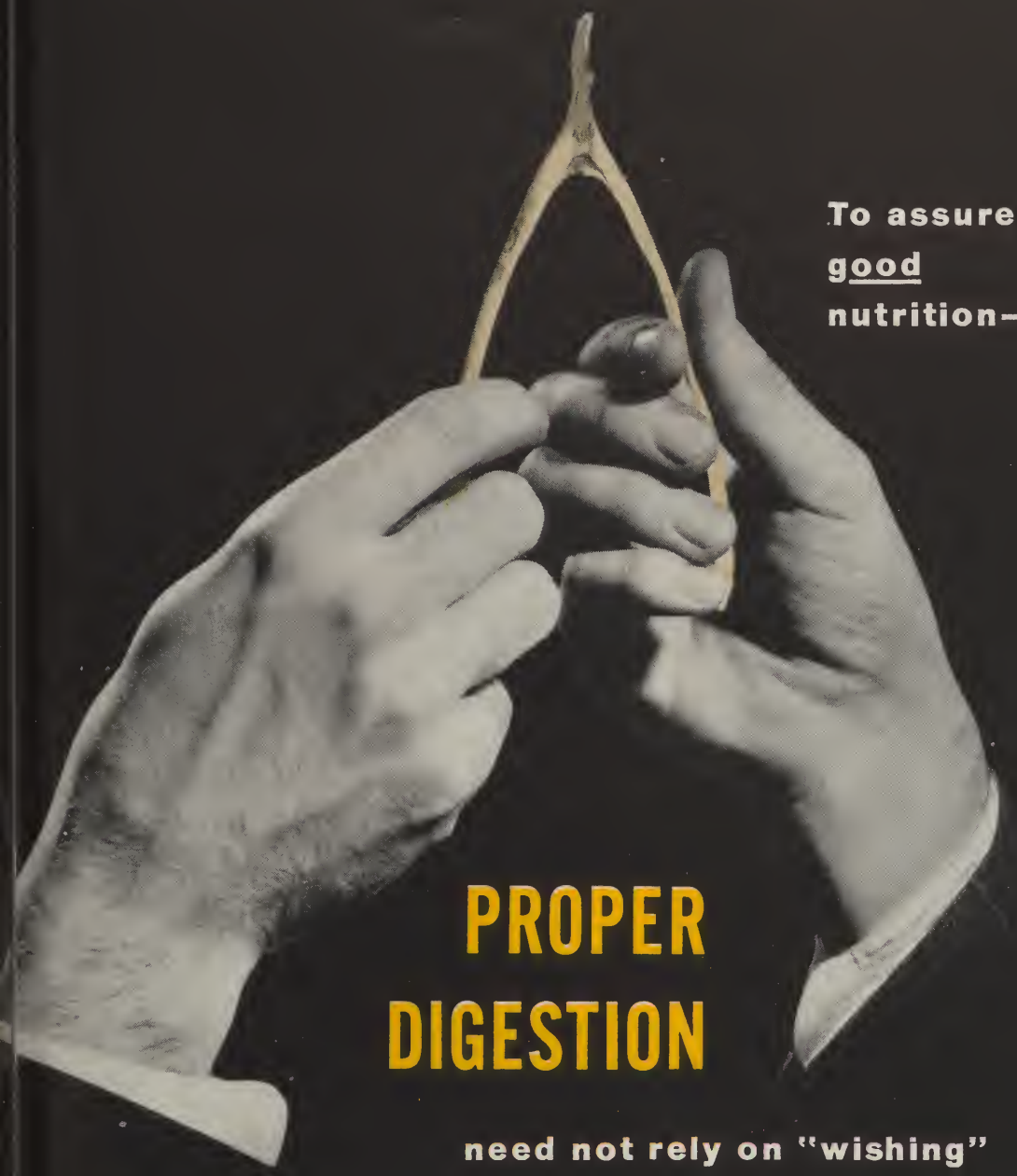
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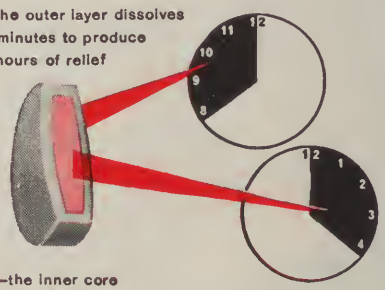
*Morrison, L. F.: Arch. Otolaryng. 59:48-53 (Jan.) 1954.

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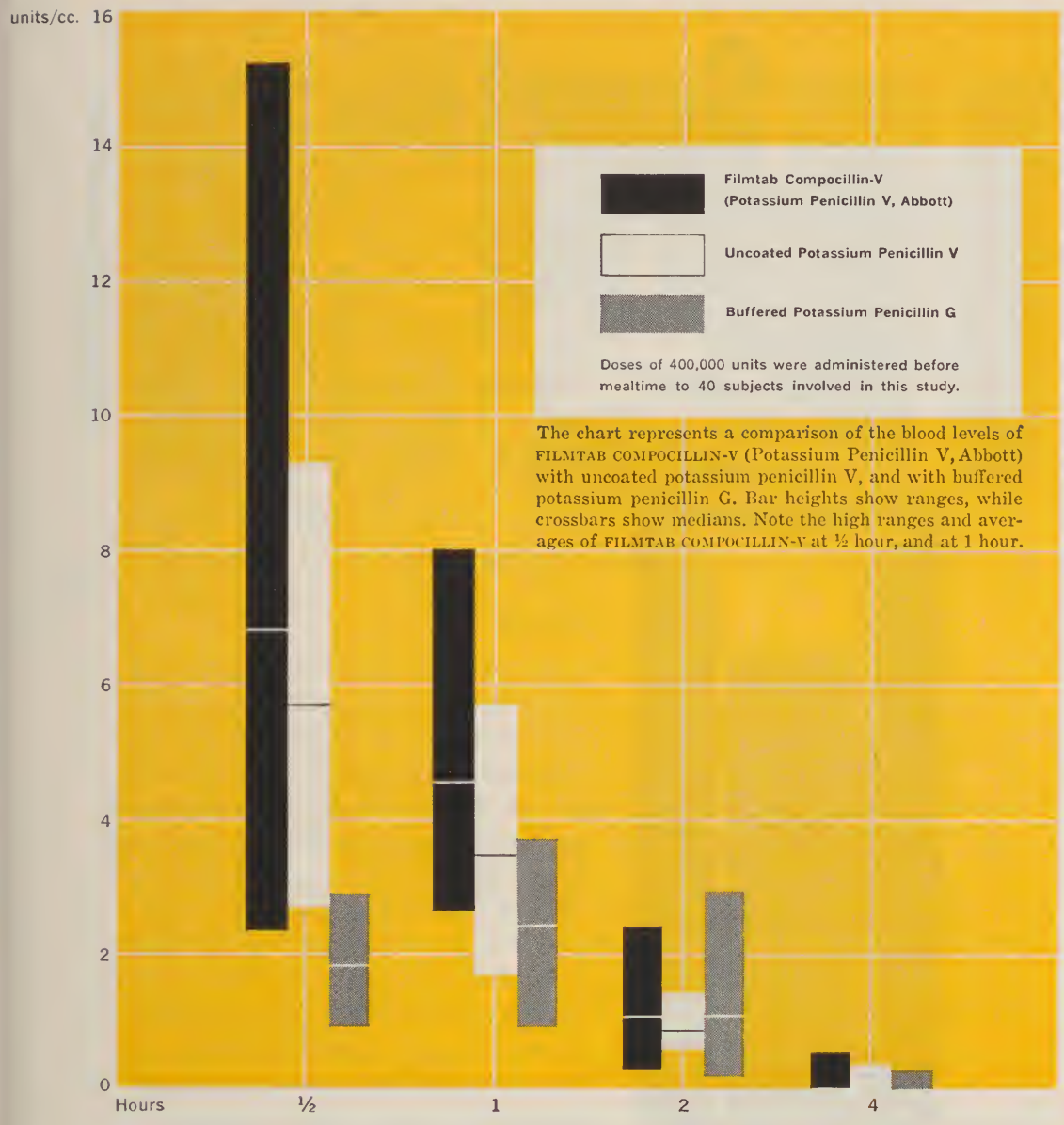
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Dosage

Recommended dosage depends on the sensitivity of the microorganism and on the severity of the disease under treatment. For pneumococcal and streptococcal infections, a dosage of 25 mg./Kg. per day will usually be adequate. Majority of staphylococcal infections will be controlled by 25 to 50 mg./Kg. per day. However, in endocarditis due to relatively resistant strains or where vegetations or abscesses occur, dosages as high as 75 mg./Kg. per day may be used. It is recommended that the daily dosages be divided into two or three equal parts at eight- or twelve-hour intervals.

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Essentially, SPONTIN is a drug for hospital use, for patients with potentially dangerous infections. In its present form, SPONTIN is administered intravenously using the drip technique. Dosage may be dissolved in 5% dextrose in water or in any isotonic or hypotonic saline solution. Some of the important therapeutic points of SPONTIN include:

1. successful short-term therapy for acute or subacute endocarditis
2. new antimicrobial activity — no natural resistance to SPONTIN was found in tests involving hundreds of coccal strains
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4. bactericidal action at effective therapeutic dosages.

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message from the President

A Destroyer of Freedom

THE International Labor Organization, usually called the I.L.O. is a holdover from the League of Nations. It is now an agency of the United Nations. Each June in Geneva it holds an annual convention, attended by representatives of labor, employers and government from each of its 78 member countries.

The State Department and the Department of Labor, the United Nations and other international groups tell us that the I.L.O. is vital for maintaining world peace, that it concerns itself with the welfare and living standards of the world-wide working man.

The delegates, attended by their advisers, discuss the items on the agenda and pass them as a Recommendation or as a Convention. Recommendations embody principles which the I.L.O. say should be made part of the law or practice of each member country. But Conventions go farther. When a Convention is passed, the legislative bodies of the various countries are required to consider it for ratification. If ratified, the Convention then becomes part of the law of the land and stands as an international treaty binding on all countries ratifying it. (Remember the majority of Senators present at a session—as few as two 'yea' votes—can bind these United States to a law which is completely foreign to our beliefs.)

With the advent of Socialistic States in Europe and the marked leaning to the Welfare State here and throughout the world, the I.L.O. has stepped beyond the field of labor, and has now entered the field of government. By the adoption of the Recommendation and Conventions of the I.L.O. the member countries will become Socialistic States.

I.L.O. Conventions can be, and are, used as a framework of specific legislation in countries all over the world. (Our Social Security Law is an example.) The Left Wing element uses them to lend support to their proposals. The I.L.O. with its ideologies is probably the most influential propaganda organization in the world today. And these ideologies and propaganda are contrary to the beliefs and principles of the United States.

We in the United States, believe in freedom of the individual. The I.L.O. is dedicated to mastery by government. The I.L.O. continually advocates more power for the government, more control by the government, more regimentation and more regulation by government—and when this occurs, the State is then master of all human affairs and destinies, and political serfdom results.

In 1944 the I.L.O. passed the so-called Declaration of Philadelphia, which said among other things, "that it was a responsibility of the I.L.O. to examine and consider all international economic policies and measures in the light of the attainment of conditions under which human beings pursue their material well-being and their spiritual development."

With this as part of its constitution the I.L.O. assumed the presumed right to draft laws on anything—and it has done just that. It has drafted "cradle to the grave" legislation. It has proposed that all employment agencies be placed in the hands of the government. (If government can tell people where they must go for jobs, government can direct the destiny of mankind.)

In 1955 the I.L.O. passed a recommendation to the effect that in each country the government should take over the education of all youngsters on the farm, providing them with text books, and teachers, prescribing examination requirements, buildings, transportation, equipment, and so forth. This is a Communistic blue print for forcing young minds into government prescribed patterns.

In the same year, 1955, the I.L.O. recommended that the government should prepare suggestions and guidance for the operation of canteens and cafeterias in industrial plants, subject to legal enforcement. In short, government is going to prescribe what people shall eat.

The Socialists took control of the I.L.O. when

ɔcialism took a firm hold in Europe. In 1954 hen Communist Russia returned to the I.L.O., returned in a big way. Russia returned as ıree nations—the U.S.S.R., the Ukraine and yelorussia, and it brought along its satellites ı full strength. It has taken over the I.L.O. oday it has a solid block of 36 potential votes , compared to 4 for the United States.

The Labor Department and the State Depart-ıent say the I.L.O. represents an opportunity) sell the American way of life and competitive ystem to the rest of the world. Probably it ould be better to say it gives us a chance to ll the American way of life.

At the last session of Congress, the Senate ɔnsidered a resolution (S.J.Res. 73) to raise ıe ceiling on United States contributions to ıe International Labor Organization from 1,750,000 a year to $3,000,000 a year. The enate aproved an increase of $250,000 which ould raise the ceiling to $2,000,000 a year. his resolution has been referred to the House oreign Affairs Committee. It comes up for dis-ıssion and action at this session of Congress.

The United States now pays 25 per cent of ıe I.L.O. budget; the other 77 nations pay the st. This means we bear one-fourth of the cost ıd have one-seventy-eighth of the votes.

Sixty-four member nations of the I.L.O. pay total of 24.07 per cent of its budget. In short, 4 nations together, pay less than the United tates; and yet these 64 nations, can completely ıt-vote the United States on any issue. And ıe I.L.O. persistently drives for a higher per-nage of the ocst from the United States, and Congress passes the resolution before it at ıis session of Congress, we will have suc-ımbed again.

If you are an American, if you believe in the merican Way of Life, if you believe in free ıterprise, if you believe in freedom of speech, eedom of religion and freedom of the human ing, then you must be against the principles ıd ideologies of the International Labor Or-ınization.

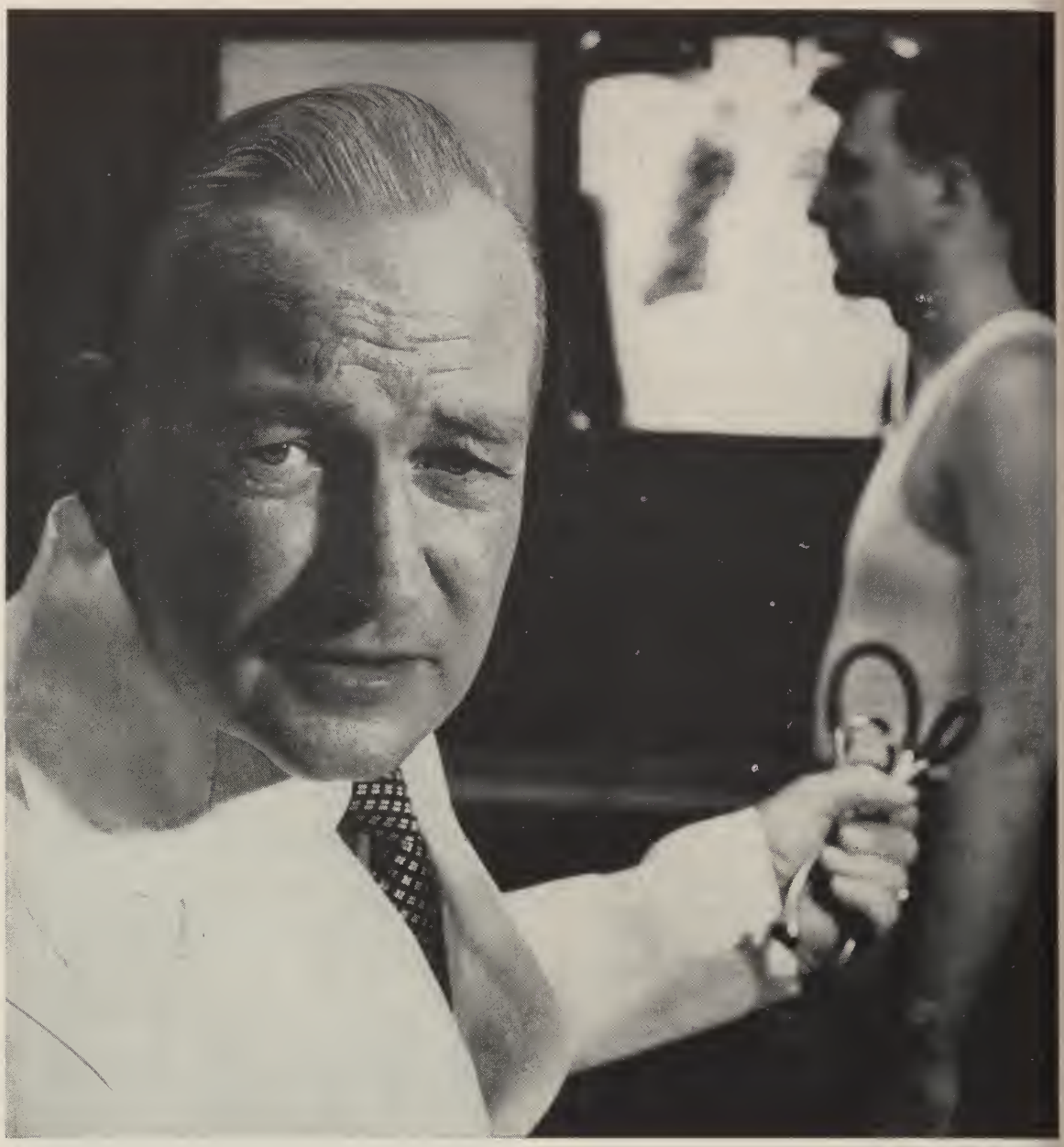
If you are a true American, you will write ɔur Senators and Congressmen and oppose any ıcrease of funds to the I.L.O. and you should rge our governmental representatives to with-raw the United States from the International abor Organization. Do it now.

E. B. Wersch M.D.

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WASHINGTON NEWS DIGEST

Washington, D. C.—Russian advances in outer space have triggered a whole series of debates, not the least of which is the issue of the scope and extent of federal participation in higher education. From it may emerge at the very minimum a scholarship program benefiting pre-medical students and some medical students.

Here are some of the questions that Congress will have to answer before it writes a final bill on federal aid to higher education:

1. Should a program be limited to federal scholarships or should it include grant money for improving and enlarging colleges and universities, or for loans to students?

2. If it is limited to scholarships, should they be non-categorical in nature rather than favoring specific disciplines?

3. If non-categorical and thus benefiting all phases of higher education, how best to justify this approach in the national interest and national security?

4. Finally, if aimed at specific disciplines, should not Congress require some obligation for service on the part of the recipient?

Some of the answers have been given in the administration's plan now before Congress. As outlined by Secretary Folson of the Department of Health, Education and Welfare, $1 billion would be authorized over a four-year period. The money would go for 10,000 scholarships a year to bright students unable to finance their schooling, for National Science Foundation grants and fellowships for post-doctoral training and up to $125,000 for any one school to improve facilities.

It has been explained that this program would benefit pre-medical students but that since scholarships would be limited to four years, students would have to find other ways to finance most of their years in medical school. After receiving their medical degrees, however, they would be eligible for the fellowships from the National Science Foundation.

The administration program favors the non-categorical approach, although preference would be given high school students with good preparation in math and the sciences. Students themselves would decide what college course to pursue.

This program has met mixed reaction. Educators say considerably more money should be authorized—some asking for as much as four times the proposed $1 billion.

The American Council on Education, which takes in nearly all accredited colleges, universities and junior colleges, told a House Education subcommittee that the 10,000 scholarships are "a minimum below which a program of effectiveness would be doubtful. . ."

The council outlined for the subcommittee these guiding principles:

1. The student should have complete freedom to choose his own program of studies within the requirements set by the individual institution.

2. Stipends up to a maximum amount set generally for the program should be sufficient to enable the student to attend an eligible college.

3. The student should not be denied the opportunity to attend any recognized college or university properly accredited under a regional accrediting association.

4. There should be no discrimination because of race, creed, color or sex.

NOTES:

First legislative activity of interest to the medical profession this year was the House Ways and Means Committee's month-long hearing on tax revision; testimony in favor of the Jenkins-Keogh bill was presented late in January.

* * *

National Science Foundation is inviting colleges and universities to apply for financial help in conducting in-service courses and institutes for advanced study by high school mathematics and science teachers. Applications must be received by NSF before March 15.

* * *

A new national organization has been established to help in finding a cure for ulcerative colitis. Encouraged by the National Institute of Arthritis and Metabolic Diseases, the new foundation will use its funds to supplement those awarded by the federal government.

* * *

After six months' operation of the disability payments program under social security, benefits were going to more than 131,000 and totaled $10 million a month. Within the next 12 months the rolls are expected to increase to about 200,000, at an annual cost of about $175 million.

* * *

Atomic Energy Commission has in effect reduced its permissible level of life-time radiation exposure by about two-thirds. The safety regulation applies to AEC employees and those of AEC contractors.

* * *

Influential Rep. John Fogarty (D., R.I.) wants the House to ask President Eisenhower to call a White House conference on aging, at which medical and all other problems of the older population would be taken up. Mr. Fogarty also would attempt to interest states in similar conferences, to be conducted prior to the Washington meeting.

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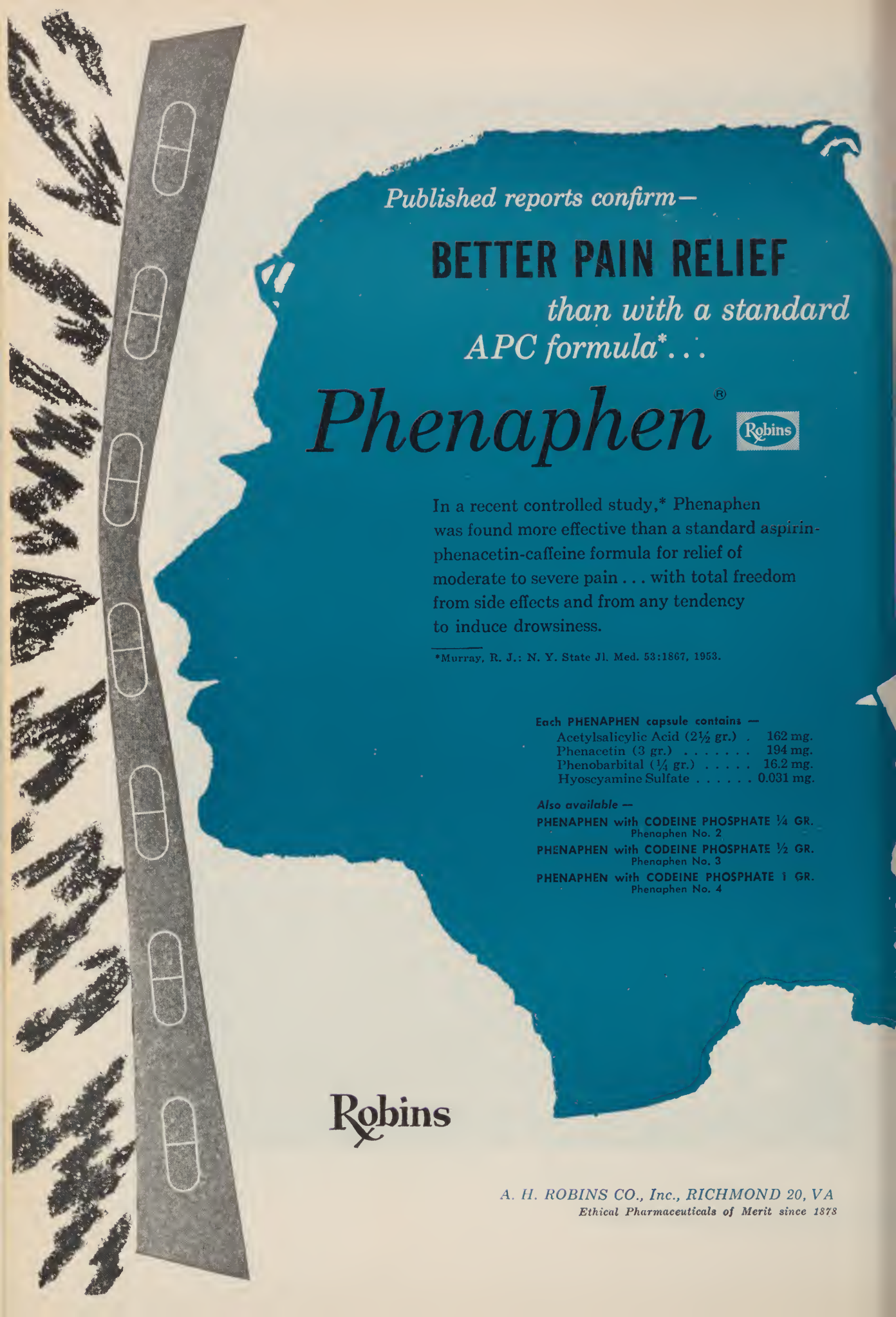
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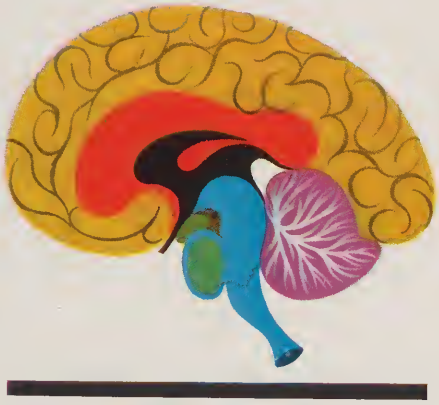
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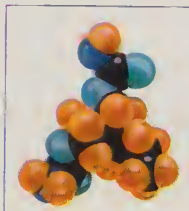
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PUBLIC HEALTH PAGE

PRESENT STATUS OF SEROLOGIC TESTS FOR SYPHILIS

RUSSELL E. TEAGUE, M.D.
Commissioner of Health
Commonwealth of Kentucky

Since the development in 1907 of the Wassermann complement fixation test and later in 1920 of the simpler flocculation test by Kahn, a variety of vastly improved laboratory procedures has been developed. Tests currently employed are of two types: (1) those which detect the presence of a substance called "reagin" through the use of a non-treponemal antigen, (Kahn, Kolmer, VDRL, etc.) and (2) those which employ specific treponemal antigens (*Treponema pallidum* immobilization, *Treponema pallidum* complement fixation, etc.) The latter group (treponemal tests) are done at very few laboratories and are generally quite difficult technically and costly to perform. Until further work is done on these tests and modifications made, the procedures which employ the non-treponemal antigens will continue to be the chief laboratory aids for the detection and management of syphilis infection.

Proper interpretation of these tests has never been more important than it is today. Increasing knowledge of syphilis serology has brought out the concept of "biologic false positive reactions" unknown to the early workers in the field who considered a reactive Kahn or Wassermann to be positive evidence of syphilis infection. A holdover from this misconception is the persistence in medical parlance of "positive" or "negative" instead of the more appropriate "reactive" or "non-reactive."

In the past several years the Venereal Disease Research Laboratory (VDRL) microflocculation slide test has proven itself to be *the most sensitive and the most specific* of the non-treponemal tests. Significantly fewer biologic false positive reactions result from this test, when properly performed, than from any other. An example of the greater specificity of the VDRL test has been shown in 13 non-syphilitic seronegative volunteer prisoners who were experimentally infected with *Plasmodium vivax* malaria and whose subsequent blood tests for syphilis were performed at a time that had been predetermined to be that at which the greatest number of false positive reactions to tests for syphilis would be produced. The false positive rate in this group ranged from 82.3% for the Kahn to as low as 3.8% for the VDRL slide test, intermediate values being obtained with the Kline and Kolmer tests.

When the VDRL test first came into general use, some patients with previous supposedly adequate antisyphilitic therapy, who had reverted to seronegativity with the Kahn, were found to be reactive with the VDRL in as high as four or even on occasion eight dilutions. The seemingly logical deduction to the clinician whose experience for many years had been with the Kahn was to discount thereafter all VDRL tests reactive in low titer. In truth this represents only an example of the greater sensitivity of the VDRL in detecting the small amounts of reagin which may persist for life in the sera of patients who have been adequately, or inadequately, treated for syphilis.

In a sense syphilis has become a subclinical entity in the face of discriminate and indiscriminate use of penicillin. We can anticipate, however, that the late manifestations of the disease will continue to present themselves if we persist in our complacency regarding the proper diagnosis and management of this disease to which the unwary attaches only historical significance.

As a result of many misconcepts concerning biologic false positive reactions for syphilis there is unfortunately an increasing tendency for those inexperienced in syphilis to disregard even reactive tests unless there is an overt history of a genital lesion. If the VDRL tests is only weakly reactive or reactive in low titer, many discount its value without even giving the patient the benefit of careful history taking and physical examination, often for fear of causing the patient unnecessary embarrassment.

Reactivity in low titer is the general rule in patients with late latent syphilis and frequently accompanies late manifest syphilis. Active cardiovascular syphilis or central nervous system syphilis (symptomatic or asymptomatic) may be seen in the presence of a nonreactive test, though usually a history of inadequate previous anti-syphilitic therapy can be obtained from these patients. In the "typical case" high titers are seen only in early syphilis or in the case that relapses or is reinfected.

It behooves us not to jump on the false positive band wagon too quickly and thus take the chance of doing our patient a grave injustice. In the detection of syphilis no readily available laboratory test yet substitutes for the proper work-up, which still includes a careful history, physical examination, neurological examination and diagnostic lumbar puncture. After such a work-up if the physician, in his clinical judgment, remains uncertain as to the presence or absence of syphilis, specific treponemal tests are available through the State Health Department Laboratory at no cost to the physician.

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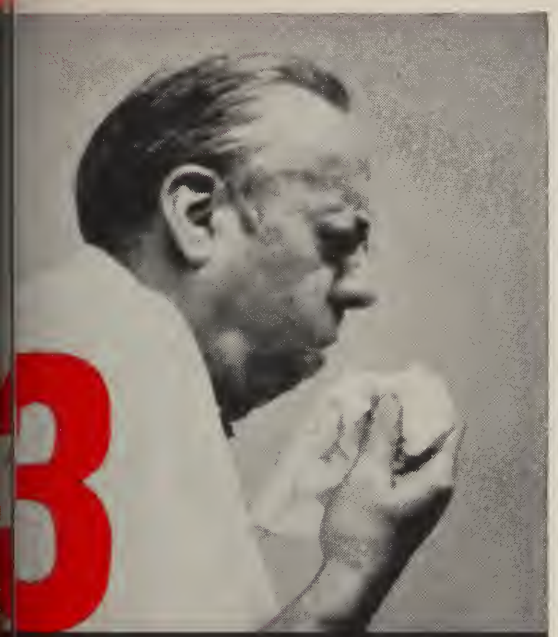
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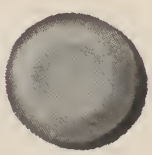
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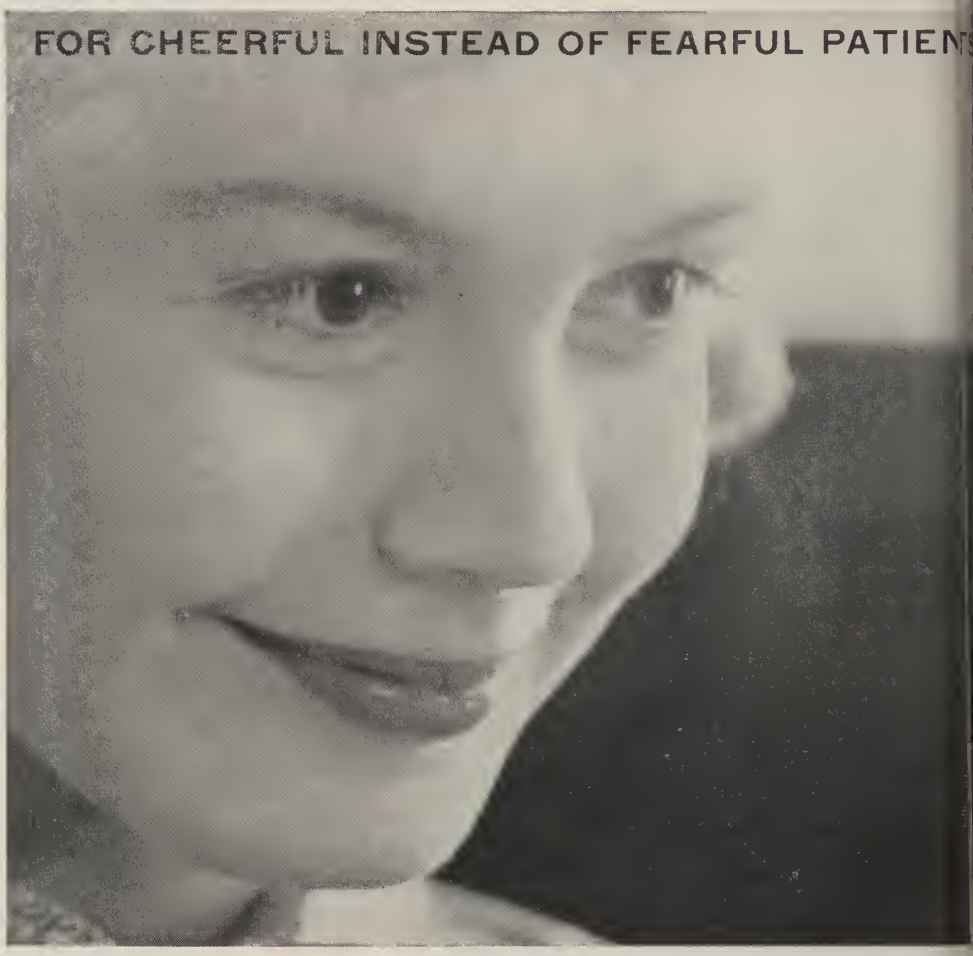
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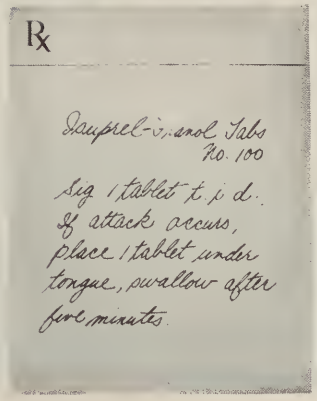
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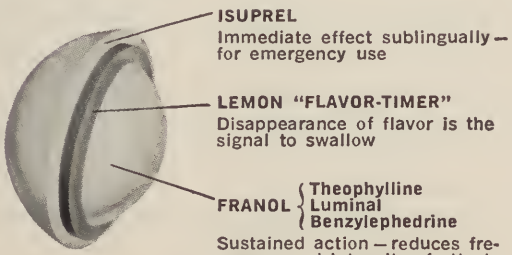
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, J. L., and DeRisio,
ey Clin. Bull. 10:45,
1956.



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Tablets:
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Each teaspoonful (5 cc.) of caramel-flavored syrup contains 250 mg. of sulfamethoxypyridazine. Bottle of 4 fl. oz.

[1] Nichols, R. L. and Finland, M.: J. Clin. Med. 49:410, 1957.

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IN THE BOOKS

MAY'S MANUAL OF DISEASES OF THE EYE: edited by Charles A. Perera, M.D.; published by The Williams and Wilkins Co., Baltimore, Md., 22nd edition; pages, 518; illustrations, 378; price, $6.

In continuous publication since 1900 this popular little book is now in its twenty-second edition. This book has long been one of the favorite texts of ophthalmology for the medical student and general practitioner. Apparently it is also a favorite of students in other lands as it has had many British, Spanish, French and Italian editions, and has been translated into Dutch, German, Japanese, Chinese, Portuguese and Urdu.

This is a remarkably complete work. The book is designed to give the reader a speaking acquaintance with the various diseases that afflict the eye. In this writer's opinion, however, there is undue emphasis on some phases of ophthalmology at the expense of others. Too much space is devoted to the technique of surgery and not enough to the recognition of some important diseases. For example, some fifteen pages are devoted to various operations for entropion, ectropion and blepharoptosis—procedures that are seldom needed by the doctor in general practice. Traumatic hyphema on the other hand, a condition commonly first seen by the pediatrician or family doctor, is barely mentioned.

Only half a page is devoted to retrolental fibroplasia. This disease a few years ago was the major cause of blindness among young children in many parts of the United States. Fortunately, the cause was discovered rather quickly and new cases are much less prevalent now. It is, however, a condition with which everyone dealing with premature infants should be thoroughly familiar.

There are a few procedures important to the ophthalmologist which are not mentioned. Most important of these is tonography, a valuable tool in the detection and study of glaucoma. This does not deserve a prominent place in a book of this scope, but I do believe it merits a brief description.

These are relatively minor criticisms. On the whole the book covers its subject well and is easily read.

Harry A. Pfingst, M.D.

FROM STERILITY TO FERTILITY—A Guide to the Causes and Cure of Childlessness: by Elliot E. Philipp, M. A., M. B.; published by the Philosophical Library, New York City, N. Y., 1957; pages, 120; price, $4.75.

This small book was written for the infertile couple to read prior to or during the process of sterility workup. It is not sufficiently technical to be of value to medical students or practitioners with the exception of two chapters.

The first of these chapters concerns artificial insemination by donors; the British author issues strong warnings on the legal and moral problems involved.

The second chapter of interest to the medical profession is the final one in the book which deals with adoption. The British system appears to be better controlled than ours and is worthy of study by all interested in this subject.

The author presents the principle causes of both male and female sterility and describes the accepted methods of study in a manner that the average patient can understand. He emphasizes the frequency of the husband being the sterile partner and of both partners being below normal.

In several phases of therapy, his discussion is too sketchy; for example, one is left wondering about anovulatory women. The controversial problem of X-rays directed at the ovaries and pituitary is not mentioned; this is certainly one subject of considerable importance to the wife and husband and a difficult subject for the physician to explain to his patients. A chapter on this problem would have strengthened the book.

Regarding surgery on occluded fallopian tubes, the author appears overly optimistic when he states that some of the best surgeons are achieving fifty per cent pregnancies of which an appreciable number carry to term. These figures are far better than those reported in our country.

Excellent case histories are presented briefly and should be of aid to some couples.

Harold W. Baker, M.D.

CLINICAL PROCTOLOGY: by J. Peerman Nesselrod, M.D.; published by W. B. Saunders Company, Philadelphia and London, second edition, June 11, 1957; 926 pages; 72 illustrations; price, $7.

Clinical Proctology by J. Peerman Nesselrod is a textbook on Proctology written by a doctor who is an acknowledged authority on the anatomy of the anorectal area.

It is quite detailed in its treatment of the anatomy. This makes it slow, but rewarding, reading to the student and to the surgeon who needs a good, detailed review of the anatomy of this region.

The clinical material is quite similar in content to the more interesting and readable "Practical Proctology" by Dr. Louis Buie. It is not, however, as thorough or as complete as Dr. Bacon's complete treatment of the subject.

We recommend this book to those who want an excellent review of the anatomy of the anorectum by one of the more brilliant of the anatomists of this specialty. It is not recommended as a quick reference work for the busy clinician and the general practitioner.

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Riseman, J. E. F., Altman, G. E., and Koretsky, S.: Nitroglycerin and Other Nitrites in the Treatment of Angina Pectoris, Circulation (Jan.) 1958.

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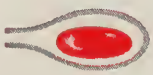
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The JOURNAL of the
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CANCER OF THE LUNG: FACTS AND FALLACIES*

Milton B. Rosenblatt, M.D.**
New York City, N. Y.

A great deal has been written in recent years, in both medical and lay press about cancer of the lung. Attention has been focused chiefly on two aspects of the disease, namely, (1) the tremendous increase in the past three decades and (2) the association of tobacco as an etiological factor.

On the basis of numerous studies in England and in the United States there has been established a statistical relationship between lung cancer and smoking. From these figures and the correlative increase of tobacco consumption and of lung cancer there has been promulgated the theory that there is a cause and effect relationship between the two phenomena. These conclusions were given a measure of support by the experimental production of skin cancer in mice by tobacco tar and by pathological studies showing precancerous change produced by smoking. I shall confine my presentation to the general subject of lung cancer with particular emphasis on the historical background, pathology and problems in differential diagnosis.

Incidence

Prior to 1925, cancer of the lung was considered an uncommon occurrence by most clinicians and pathologists. In the succeeding three decades there was a marked rise in incidence and at present it is the leading form of fatal cancer among males in the United States. Primary lung cancer accounts for 10 per cent of the total cancer deaths and 20 per cent of the cancer deaths among males between the age of 45 and 70 years. Similar increases have been noted in other countries, particularly in Great Britain where in England and Wales the crude death rate from lung cancer was 8 per million in 1900 and increased to 321 per million in 1952. In the United States there were approximately 5000 lung cancer deaths in 1935, 12,000 in 1945, and 27,000 in 1955.

The total number of lung cancer deaths in the United States continues to increase but certain statistical observations have not generally been publicized. Between 1914 and 1932 the age adjusted mortality rate for white males had increased 393 per cent or about 23 per cent annually. During the period 1932-1941 the rate increased 168 per cent or about 18 per cent annually. Between 1940-1949 the rate of increase in mortality began to decline and was about one-half that of the previous decade, indicating that the period of rapid rise was terminating. The biometric studies by Dorn at the National Institute of Health show that the increase in mortality from lung cancer is slowing down and is occurring only in the older groups. The significance of this observation will be alluded to subsequently.

Historical Background

It is part of human frailty to assume that what we did not recognize in an earlier decade, did not exist. Proponents of the smoking-lung cancer theory point with conviction to the earlier United States vital statistics and hospital autopsy records which show a paucity of lung cancer cases. However, they omit the facts that the death registration area was first established in this country in 1900, that there was originally no specific category in which to record a case of lung cancer, and that the earliest data was published by Gover, in 1939, in a special study for the U. S. Public Health Service.

Let us see what medical history has to say about the prevalence of lung cancer since the recent recognition of this disease by Reader's

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**Associate Professor of Medicine, New York Medical College.

Digest and similar scientific minded popular publications. More than 150 years ago, English and French physicians were describing the clinical and pathological manifestations of cancer of the lung in medical journals of that era. Laennec, the inventor of the stethoscope, described lung cancer in 1805 and elaborated on it in 1819 in his classic treatise on mediate auscultation. In the fourth edition of this book in 1838, there is a footnote by Professor Andral which states that since Laennec's first description of lung cancer—"the periodical publications have teemed with cases of this disease." All this took place a long, long time before cigarette smoking became popular.

During the latter half of the 19th century, there was a great number of cases reported in England, France, Germany and the United States. The increasing awareness of this disease was manifested by the reporting of collected series of cases. In England, West reported 155 cases from St. Bartholomew's Hospital. In the United States, Adler urged greater recognition of lung cancer in the New York Medical Journal on February 8, 1896 and in 1912 published a book on the subject which included 374 collected cases in which he was certain of the diagnosis and 207 suspected cases. The medical literature is replete with clinical studies during the early 1920's which describe the physical signs, roentgen appearance and even bronchscopic findings. Although the first successful pneumonectomy was performed in 1933, surgical resection for lung cancer has been attempted since the first decade of this century. A great many of our representative institutions, including cancer hospitals, were relatively unaware of lung cancer but it is equally evident that in other institutions, lung cancer was a familiar entity. It may be of interest that in 1912, cigar smoking was given the blame for lung cancer. However, the recent statistical studies have given relative absolution to the cigar and have implicated the cigarette instead.

It has been argued with great vigor that had lung cancer been common in the earlier decades of this century that our great pathologists would surely have recognized it. To this argument I offer the old adage that we see only that which we know. In those institutions familiar with lung cancer, the autopsy record shows not only the prevalence of the disease in the past but also that throughout the ensuing years, the increase has been proportionate to that of all cancer. Between the years 1915 and 1918, Jaffe in Vienna, found the frequency of lung cancer to be 11 per cent of all carcinomas, approximately what it is at present. Bonser, in Leeds, found a 7 per cent frequency between 1893 and 1902. Maxwell and Nicholson reported 10 per cent frequency at St. Bartholomew's Hospital before 1915. Passey and Holmes did a serial study of the teaching hospitals in Great Britain concentrating on institutions that had a consistently high autopsy percentage before interest in lung cancer became intensified. Their survey showed no striking changes in the percentage frequency of lung cancer between 1894 and 1928. The total number of lung cancer cases has increased but only in proportion to the increase in total hospital admissions. Lung cancer statistics from German hospitals prior to 1925 showed percentages in relation to total cancers which are not too varied from current statistics. In the period 1899-1902, Junghanns, in Dresden, found approximately 11 per cent and in 1912-1917, found 13 per cent. Seyfarth, in Leipsig, found 11 per cent between 1914-1918. In Berlin, Hanf found 9 per cent in 1923, and Olson, in Boston, found 7 per cent in the period 1920-1924. One of the most illuminating studies was that of the London County Council whose survey of a group of hospitals showed the percentage of lung cancer to total cancers to be 25 in 1936 and 27.1 in 1947.

Increased Prevalence

With approximately 30,000 new cases and 25,000 deaths from lung cancer annually, no one can deny the increased prevalence of the disease. However, the question to be answered is whether this increase is real and due to carcinogenic exposure, or whether it is only apparent and due to explicable factors. If the latter view is correct, the attempts to find an alleged carcinogenic factor, such as tobacco, are fruitless. As an active observer in the field of pulmonary diseases for more than 25 years, it is my belief that one of the most important factors in the increased prevalence of lung cancer is greater awareness of the disease and the availability of the diagnostic tools with which to confirm diagnosis. It is unrealistic to compare incidence statistics of the present with those of three decades ago, when the means to establish a diagnosis were not available. Diagnostic roentgenology, bronchoscopy, tissue biopsy, exfoliative cytology and exploratory thoracotomy are investigative measures of recent vin-

tage. According to Smithers, there were 29 bronchoscopies at the Brompton Hospital between 1926 and 1929 whereas now the number is well over 800 each year. It has been repeatedly pointed out that when a disease becomes diagnostically accessible, its incidence automatically increases. May I digress to point out that the increase in coronary artery disease in this country may not be so much an issue of increased fat consumption as it is of increased electrocardiography. It is stated in 1930 there were less than 1,000 electrocardiographs in general use throughout the country and now there are over 35,000.

A comparison of lung cancer with upper respiratory cancer is of considerable interest in as much as both tracts are equally subjected to exposure with the alleged carcinogen, tobacco. In contrast to the increased incidence of lung cancer, there has been no dramatic rise in incidence in other organs exposed to tobacco smoke. Malignant tumors of the nasopharnyx and larynx are of epithelial origin and if tobacco is a potent carcinogen for bronchial mucosa it should be equally effective in the upper respiratory epithelium with which it is in contact in greater concentration. However, no statistical association has been demonstrated between an increased incidence of upper respiratory cancer and increased consumption of cigarettes. The death rate from cancer of the nose and accessory organs was 0.3 per 100,000 in 1940 and 0.4 per 100,000 in 1950. The death rate from cancer of the larynx was 1.1 per 100,000 in 1940 and 1.2 in 1950. Warran, in New Orleans, noted that between 1937 and 1947 the lung cancer rate had increased 8 to 21 per 100,000, while laryngeal cancer had increased only from 6 to 8 per 100,000. In England, Kennaway found no increase in laryngeal cancer for thirty years and observed that the diagnostic methods for this condition had not changed during this period.

All these data confirm the dictum that accessible cancers have not shown any spectacular increase in incidence. This applies to cancer of the lips and buccal mucosa where there is exposure to smoke and cigarette tar as well as to other forms of cancer such as breast, cervix and skin. Dr. Greene, Professor of Pathology at Yale, has pointed out that few cigarette smokers escape tar stained fingers and yet there has been no increase in skin cancers. He also adds that, on the basis of statistical reasoning, cigarette tar should be considered a cancer preventative.

Since the introduction of modern scientific methods not only lung cancer but other bronchial tumors have shown a phenomenal increase in incidence. I refer particularly to bronchial adenona which was a rarity in 1930, gradually increased to 100 cases in the literature by 1940, and to approximately 1,000 cases by 1950. Most of these cases have been erroneously diagnosed as tuberculosis, abscess or recurrent pneumonia but improved diagnostic methods ultimately revealed the true condition. The argument that inhaled irritants were responsible for the increased incidence does not hold for bronchial adenoma because the tumor does not originate from the epithelial surface but rather from the seromucous glands well below the surface epithelium.

Age, Sex and Geographical Distribution

The second major factor responsible for the increased incidence is the age distribution of lung cancer. This is a disease of late adult life. While rare cases have been encountered in young adults and even in children, the vast majority of cases are found in the 5th, 6th, and 7th decades. It is in this age group that the increased lung cancer has chiefly occurred. The average life span of the population in the United States has increased steadily and is now well past 65 years. In the early years of this century there were but 4,000,000 people over 60 years whereas now there are over 14,000,000. The prevalence of lung cancer has increased because there are more people reaching the cancer age. There has been no increase in cancer in the younger age groups. As the average length of life increases we must anticipate a greater number of cases. Although the total number of cases will probably increase, the statistics already show that the rate of increase is declining.

Cancer of the lung is predominantly a disease of males. Although the disease also occurs in females the ratio has always been found in favor of males. Representative surveys show ratios ranging from 4.1 up to 10.1. The sexual affinity of lung cancer for males had led to speculation that it is the smoking habit of the males which is responsible. This disregards the fact that females have been smoking rather heavily for a great many years and it is rather difficult for an unbiased observer to determine which sex does the most smoking. According to recent figures there are at present in the United

States 26,000,000 adult regular male cigarette smokers and 15,000,000 adult female regular smokers. If smoking is an etiologic factor in lung cancer we should expect that the progressive increase in smoking among females would gradually lead to an equalization, or, at least a diminution of the ratio between males and females. This has not occurred. Although the incidence of lung cancer has increased among females, the ratio is still predominantly in favor of the male. As a matter of fact, the national statistics show the ratio has become larger.

The prevalence of lung cancer throughout the world has, in general, shown progressive increase similar to that observed in this country. This increase has occurred in areas with wide variation in habits, occupations, and climate. It has occurred in countries where cigarette consumption has gone up tremendously (United States, Canada, Italy) and it has occurred in countries in which cigarette consumption has been fairly stationary (Germany, Austria, Turkey, Japan). The increase is undoubtedly due to the same factors that prevail everywhere, namely, improved methods of diagnosis and increased life span of the population.

In some areas of the globe, lung cancer is still considered a rarity. However, it invariably follows that with the establishment of diagnostic centers the incidence of lung cancer, as well as other diseases, automatically increases. Urban life has been blamed for lung cancer because of air pollution but, in the final analysis, it probably will be concluded that the incidence of lung cancer varies directly with the number of doctors per hundred thousand population. Philadelphia was at one time considered a hot bed for lung cancer, before it was realized that the incidence was due to the diagnostic skill of the Jackson Bronchoscopic Clinic. The relation between the incidence of new cases and improved diagnostic facilities was aptly demonstrated in a report from Dacca Medical College Hospital in East Pakistan. The appointment of a physician trained in pulmonary diseases was followed by the disclosure of twenty proven cases of lung cancer in a period of 18 months. The patients were predominantly male in late adult life. Of etiological significance is the fact that all but two patients came from rural areas where tarred roads and automobiles were conspicuously absent. Equally absent was exposure to cigarettes; 14 did not smoke, 4 smoked occasionally, and 2 were heavy smokers. Smoking in East Pakistan is generally confined to the hukka, a pipe in which the smoke is filtered through water.

Surveys tend to arrive at conclusions sympathetic to the opinions of the observer. If the investigators believe that tobacco is harmful, the results show an association with lung cancer; if air pollution is suspected, somehow, the results point in that direction. One observer in New Zealand found an entirely different cause of lung cancer. His survey showed that the risk of contracting lung cancer was directly proportioned to the number of years the New Zealanders had previously spent in England. Smoking was absolved. The real culprit was exposure to the English environment.

Problems in Diagnosis

Despite our diagnostic equipment, the recognition of lung cancer while it is still localized is fraught with difficulties. Too often the disease is diagnosed in pre-terminal state. The educational cancer campaigns have not yielded a significantly higher percentage of operable cases. With the help of the X-ray examination, bronchoscopy, biopsy, and thoracotomy we are diagnosing a great many more cases, but, most of them are diagnosed in a far advanced state. If operability is taken as an index of diagnostic acumen we are faced with the fact that only one third of the diagnosed cases are suitable for thoracotomy, and, only one fifth have lesions sufficiently localized to justify surgical resection.

Prior to 1925, the diagnosis of lung cancer was usually made at the necropsy examination. Clinical diagnosis were uncommon. Out of 174 cases collected by Sehrt in 1904, only six had been diagnosed during life. A similar study by Ferenczy between 1917 and 1925 showed 44 cases diagnosed clinically out of 150. The assumption that our diagnostic acumen has improved progressively in the succeeding years is not supported by the facts. In 1954, Farber reported on 1,070 cases collected from 19 hospitals in California. In over 600 cases (61 per cent) the diagnosis was not made prior to autopsy.

Our inability to be uniformly successful in diagnosing lung cancer is somewhat approximated by our enthusiasm for diagnosing disease when it is not present. There are a great many conditions which simulate lung cancer and which offer serious problems in differential diagnosis. The wider use of exploratory thoracotomy has helped in clarifying many of these

problems but it has also demonstrated how wide the margin of error can be in the best institutions. A report from Mayo Clinic, a few years ago, revealed that out of a series of 123 cases of lung cancer, only 63 had been diagnosed before surgical exploration.

It has been advocated that routine surveys of the population would yield a significant increase in the number of diagnosed cases. These surveys have been done in association with case finding studies for tuberculosis and as independent investigations. A summary of several mass chest x-ray surveys show the average yield to be about 1 case out of 10,000. In Los Angeles a study of almost 2,000,000 films yielded about 200 cases of lung cancer. Of considerable interest was the fact that 27 patients with negative x-rays died of lung cancer one year after the survey; and the total reached 146 cases two years after films had originally been reported negative.

Higher incidence rates are obtained by restricting the x-ray survey to selected groups of population. A Philadelphia survey of approximately 150,000 people showed the incidence of lung cancer to be 3 per 10,000 for the whole group; 16 per 10,000 for all adults over 45 yrs.; and 26 per 10,000 for males over 45 yrs. This is to be expected in view of the natural age distribution of the disease.

Pathology

A brief review of the pathology and pathogenesis of lung cancer makes possible a better understanding of the problems in diagnosis. Cancer of the lung may originate from any focus along the epithelium of the bronchial tree from the main bronchus down to the respiratory bronchiole. The variation in epithelial pattern of the bronchial division determines the histological character of the particular tumor. The pathological behaviour of the disease and, often, its clinical course are governed by the site of origin in the main or lobar bronchi. The gradual obstruction of these larger bronchi produces a characteristic chain of events due to the mechanical effects of the obstruction and the subsequent infection which occurs in the lung, distally. The clinical syndromes which follow include emphysema, pneumonitis, abscess and atelectasis. Hilar cancers are prone to produce pulmonary symptoms which compel the patient to seek medical care. About 15 per cent of lung cancers arise in the peripheral portion of the lung, from small or terminal bronchi. Their location is not conducive to the production of pulmonary symptoms and they are usually detected in the course of an x-ray examination or not until they have produced metastic lesions in adjacent or distal structures.

A great many histological classifications have been introduced in the literature but the majority of cases may be classified as (1) squamous, (2) adenomatous and (3) undifferentiated. Squamous carcinoma is the most common. Numerous attempts have been made to identify the clinical behaviour of lung cancer with the specific cell type of the tumor. While the general impression is that the squamous cell cancer is less invasive and more amenable to surgery, there are many factors which determine the clinical course of the particular case.

Tumors which originate from terminal bronchioles often invade the alveoli and produce characteristics histologic features. The difficulty in identifying a bronchiolar point of origin has given rise to the concept that these tumors may arise from alveolar epithelium and the term alveolar cell carcinoma has come into wide use. Alveolar cell tumors often have multiple points of origin. This often produces a bizarre x-ray configuration and does not predispose to easy diagnosis nor to definite therapy.

Cancer of the lung may exist for many months, and possibly years, without producing conspicuous symptoms. This has given rise to the belief that it tends to remain confined to the point of origin. This is not correct. Thoracic surgeons often find the "early" cases inoperable because of widespread metastases throughout the lung and adjacent structures. The tumor may assume a fairly large size before presenting a suspicious roentgen shadow and when so-called typical shadows are found, they usually represent the secondary manifestations occurring distal to the actual bronchial obstruction.

Lung cancer spreads along four different pathways. It may extend along the epithelial surface in a centrifugal direction such as is observed in the alveolar cell carcinoma, or, the tumor spreads by contiguity, invading adjacent structures in the lung and in surrounding organs of the thorax. The response of normal tissues to the malignant cells determine the subsequent course of events. In squamous cell carcinoma, a marked connective tissue response is often observed which appears to deter further extension.

Inasmuch as the lung is very rich in vascular and lymphatic tissues the opportunities for lymphogenous and hematogenous spread are numerous. The pulmonary lymphatics surround the pleura and form a very accessible path for the pleural and extrathoracic metastases. Most of the deep lymphatics surrounding the bronchial, arterial and venous structures drain toward the hilum. This explains the almost univeral involvement of the hilar lymph nodes in bronchiogenic carcinoma. The flow of peripheral lymphatics is toward the pleura so that the peripheral tumors often are first recognized by their metastatic involvement of the pleural membranes, ribs, or vertebrae.

Although we are all aware of hematogenous metastasis to distant organs the full extent of hematogenous spread is not commonly realized. Surgical specimens after pneumonectomy or lobectomy often show extensive involvement of veins even though the tumor appeared to be small and completely localized. Malignant thrombosis and embolization into progressively larger channels are common pathological findings. Arterial malignant thrombosis occurs with much less frequency. The ease with which lung cancers invade the adjacent veins and subsequently metastasize to distant parts of the body explains why metastases are so widespread, even where the tumor itself is very small. It is not unusual for a patient's first symptoms to be due to the metastatic foci rather than the primary tumor itself, particularly when the tumor is not interfering with the dynamics of pulmonary function.

Primary lung cancer is often confused with metastatic tumors arising in other organs such as breasts, stomach, colon, thyroid, etc. The metastases may appear as solitary round masses on the x-ray film and simulate primary cancer throughout the entire duration of the illness. In cases of this type the diagnosis is often established only after surgical exploration or necropsy. The term sarcoma of the lung was used freely in older medical literature to denote a malignant tumor. However it signified only fleshy growth and did not denote a specific histologic entity. Primary sarcoma of the lung is very rare and a review of the literature between 1912-1954 reveals only 34 cases.

Summary

1. Cancer of the lung has been recognized for more than 150 years, antedating the popularity of cigarette smoking by more than a century.

2. In hospitals interested in the disease, and/or with routine autopsies, there has been no real increase in lung cancer with respect to total cancers. This holds for the 19th century as well as for the 20th century.

3. The attempt to find an etiological agent for the increase in lung cancer has been going on for half a century. At first the onus was on cigars and as cigarette consumption increased the blame gradually shifted to the latter.

4. A statistical association does not imply a cause and effect relationship.

5. Bronchogenic carcinoma has never been produced by tobacco or its products in any experimental animal despite the multiplicity of attempts.

6. History has repeatedly demonstrated that whenever an inaccessible cancer becomes accessible, the incidence automatically increases. Prior to 1930, the clinical facilities for the diagnosis of lung cancer were few and far between even in thoracic disease hospitals. The perfection of diagnostic tools (exfoliative cytology, bronchoscopy, radiology, and exploratory thoracotomy) occurred within the past 25 years.

7. Lung cancer is a disease of older age groups. There are more older people among us and more potential candidates for lung cancer. The total number of cases is increasing but the rate of increase is slowing down and will eventually be stabilized like laryngeal or other respiratory cancers in which diagnostic methods have been long established.

8. The nasopharynx and the larynx are greatly exposed to tobacco products and if tobacco is a carcinogen for the lung, it should also act upon the upper respiratory passage. However, no statistical association has been demonstrated between increased consumption of cigarettes and increased incidence of upper respiratory cancer.

9. The progressive increase in smoking among women over a period of many years has not led to a change in the ratio of incidence which is predominantly in favor of the male.

10. The prevalence of lung cancer is more related to diagnostic facilities than to smoking, air pollution or other urban factors. No matter how remote the community, the establishment of diagnostic centers inevitably results in a greater incidence of lung cancer.

TUBERCULOSIS IN CHILDHOOD: SOME ASPECTS OF PREVENTION, DIAGNOSIS AND TREATMENT*

GARDNER MIDDLEBROOK, M.D.**
Denver, Colorado

TUBERCULOSIS is the generic name for a whole group of diseases caused by tubercle bacilli. Although the word is of recent origin, the disease itself is as old as man. Tuberculosis of the spine was already afflicting prehistoric man over six thousand years ago. Indeed, it is so old—it has been with us so long—that I suspect we are all getting bored with it, both physicians and laymen. Worse than that, perhaps, it smacks of Victorian romanticism; and what could be more abominable than that, today?

Just for dramatic purposes, let us imagine that the "White Plague" has very recently struck us, starting two or three years ago—not with its earlier fury but as it actually exists in the world today.

Koch's Discovery and Its Use

Let us pretend that Professor Koch has just shown us that a new type of bacillus with unique staining characteristics can be isolated from persons infected with this malady. He has also extracted from artificial cultures of these germs, a material which he calls "tuberculin." And, it has been shown that experimental animals or human beings infected with his germs of tuberculosis are specifically allergic to his tuberculin material. Now, the infection is so rife in the population of our country that almost fifty-million Americans have been shown to be allergic to Professor Koch's tuberculin; and last year almost one-hundred thousand Americans were newly discovered to have the disease in one form or another; and fifteen thousand died of it! How many Americans have had the disease and therefore are potentially significant cases is not known with any accuracy, but it is something close to one million—and this is no pretense. Here in Kentucky alone, some fifteen hundred new active cases of tuberculosis were reported in 1956. Probably an equal number exist in our population but were not discovered or reported; and the year before, in spite of rapid accumulation of knowledge concerning treatment of the disease, four-hundred-sixty-five persons died of tuberculosis in Kentucky. Unlike atherosclerosis and cancer, one-half of the newly reported cases of tuberculosis are under 43 years of age.

However, there are some encouraging aspects of this plague which have come to light and for which pediatricians are primarily responsible, for many children are afflicted, too. For example, they have discovered that tuberculosis infection in infancy and childhood is immediately a serious matter—I emphasize the word immediately—only before the age of 3 and they have pointed out that it is possible to use Professor Koch's tuberculin as a guide to whether or not the infant or child has recently been infected with tubercle bacilli. They have found that the rate of new infections per year among infants and children, i.e., up to the age of 15 or 16 years at least, is only one to five per one thousand. Thus, by doing repeated tuberculin tests in schools and well-baby clinics, as well as in routine pediatric practice and in hospitals, it is possible to detect most of the new infections and it is becoming a widely accepted practice to treat all children under the age of 3 years merely on the basis of a definitely positive tuberculin skin test. Inasmuch as only one out of every ten children who becomes infected with tubercle bacilli between the ages of 3 and 15

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**Director, Research and Laboratories, National Jewish Hospital at Denver; Associate Professor Microbiology, University of Colorado School of Medicine.

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11. The epidemiological studies, unsupported by corroborative experimental data show only the number of smokers who have lung cancer. Any other conclusion is speculative. In a disease like cancer, in which so little etiological data has been established, it is presumptive to rely on epidemiological studies, which are questioned by statistical experts and refuted by clinical experiences.

Until the etiology of lung cancer has been firmly established, more will be gained by a circumspect point of view. Medicine has had its share of colossal blunders in the past. Not too long ago, tuberculosis was attributed to night air and lung cancer to tuberculosis.

years will ever develop serious tuberculosis, a controversy now rages as to whether or not specific active treatment is indicated for these children also. It is certainly true that those individual children who are very sensitive to tuberculin are much more likely to develop serious TB than those who are only weakly sensitive. Therefore, many physicians are treating strongly positive tuberculin skin tests, as it were, even in the absence of demonstrable disease; and there is much to be said for this practice.

Pathogenesis of Tuberculosis

Here I catch myself talking about treatment when I know you are just as interested in what has been learned concerning the pathogenesis of the diseases caused by these newly discovered germs, the tubercle bacilli. As you can well understand, two or three years has not provided sufficient time to acquire much definite knowledge. I shall try to summarize it as briefly as possible; and I beg you to forget that you have ever read any textbook descriptions of tuberculosis.

The cycle always starts from a patient with active, cavitary, pulmonary tuberculosis. A droplet nucleus is formed when he coughs forcibly. This nucleus contains one, or at the most, ten tubercle bacilli. This nucleus is small enough that it can reach an alveolus where it is phagocytosed by a leukocyte. The bacillus divides by asexual fission, and at the same time produces a toxic fatty acid of high molecular weight which injures and ultimately kills the phagocyte. More phagocytes are attracted to the area by the sick and dying first phagocyte, and share in the deadly feast. They ingest the bacilli which have now increased ten- to 50-fold in numbers and the process continues unabated with the injury and death of more phagocytes, until some time between the fourteenth and twenty-first day after the first bacillus was inhaled. By the twenty-first day a tiny pin point is visible to the naked eye, consisting of a mixture of dead and living phagocytes, lymphocytes and plasma cells and of thousands of bacilli. Now, by this time some of the bacilli have escaped or been carried by phagocytes through lymphatic channels to the tracheobronchial lymph nodes where they also have multiplied to produce lesions which are not yet visible to the naked eye. All this time, the bacilli have been multiplying peculiarly slowly, just as they do in the best artificial culture media—much more slowly than streptococci, pneumococci, Friedländer bacilli or plague bacilli, a characteristic to which I will refer again later.

Host Reaction

During these first few weeks, another process has been going on which changes the picture completely by the fourth to sixth week after the primary infection: the host is reacting, and this reaction has a dramatic manifestation. The host tissues, especially the leukocytes and the endothelial cells of the capillaries, have become allergic to that very material which Professor Koch described for use in testing for the infection—tuberculin, a complex mixture of water-soluble proteins secreted by the bacilli into their environment. The histologic manifestation of this allergy to tuberculo-proteins at the sites of multiplication of the bacilli is a type of infarction necrosis which turns the tissues to the consistency and appearance of cheese—caseation. Now, if this necrotic tissue is near a surface, mucosal or endothelial, a bronchus, a renal pelvis, or the meninges, an ulcer will be formed.

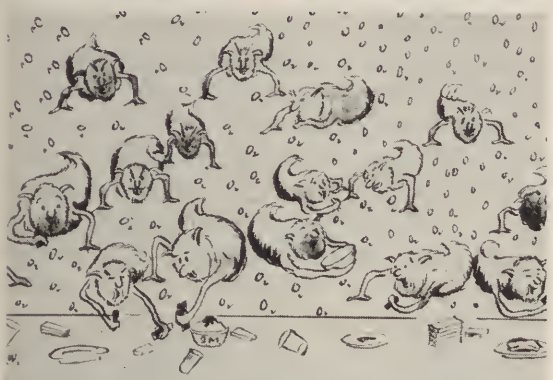
This is a happy situation for these parasites: they were beginning to be very embarrassed by lack of oxygen in the infarcted area, and these bacilli need oxygen for growth. In fact, they cannot grow and multiply at all without it (there is one fact, at least, on which all bacteriologists agree). However, fortunately for the parasite, it doesn't have to multiply in order to survive. If no ulcer forms, it can simply lie in wait, as it were, in the anaerobic necrotic tissue until something happens to bring oxygen in again. How long can it wait? A few months, perhaps one out of many million can survive for a few years to be revived again when something happens *to the host* to permit oxygen to get to the bacilli again, resulting in a resumption of multiplication, continuation of the infection; and the parasite hopes again, just a tiny ulcer—that's all it needs to reproduce many many more of its kind—and from our point of view, to produce disease.

A New Treatment Concept

Why have I spent so much time in presenting this picture of the pathogenesis of tuberculosis? Let us see. While the pathologists and immunologists have been working on the host-parasite relationship, the bacteriologists and the pharmacologists have been devising some magic bullets which can attack the parasites directly,



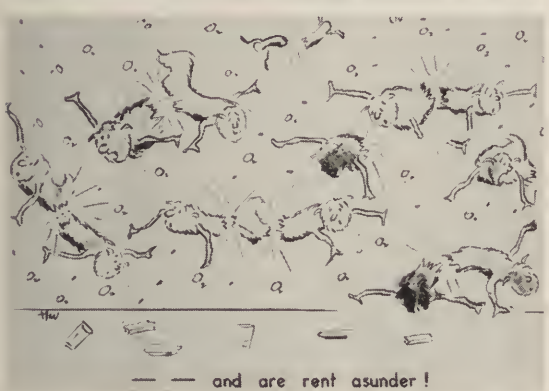
Resting TB germs in dead tissue deprived of oxygen.



TB germs activated by oxygen eat foods including poisonous drugs.



TB germs, satiated, divide — —



— — and are rent asunder!

Figures 1-4

and which have sufficiently low toxicity that they can be given to the tuberculous patient in such a fashion that they will actually be delivered to the tubercle bacilli in the body. The microbiologist learned that at least two of these drugs can actually kill tubercle bacilli, but only under certain conditions—only when the germs are actually dividing. As you know, germs have to divide in order to multiply (a fact which always seemed arithmetically paradoxical to me, though true). The obvious consequence of this fact is that only those tubercle bacilli which are actually dividing during exposure to the drugs will actually be injured by the drugs; those germs which are resting as a result of oxygen deficiency in necrotic foci will be unaffected by any of the drugs which have thus far been discovered to have chemotherapeutic activity in tuberculosis. On the one hand, it is easily understood why it is impossible to cure tuberculosis in the sense that one can rid the body of all living tubercle bacilli—except under uncommon clinical conditions. On the other hand, our whole approach to the treatment of the disease has been modified by this dynamic concept. (Fig. 1-4)

Drug Resistance

The microbial geneticist predicted and the clinician confirmed the fact that any large-sized population of tubercle bacilli contains mutants, "sports," which are naturally resistant to the antibacterial effects of the drugs which have thus far been made available for the treatment of tuberculosis. At the same time, the microbial geneticist showed how it should be possible by the use of at least two drugs to avoid this drug-resistance; and the clinician has proved that this can actually be done in practice. By administration of either isoniazid and streptomycin or isoniazid plus another synthetic drug, PAS, in adequate dosage—and I would emphasize this point of adequacy of the dosage—it is possible to arrest the progress of the infection in almost every case of tuberculosis which is caused by tubercle bacilli which are susceptible to the action of these drugs as tested in artificial culture media. This means complete arrest of the infection in over 98% of newly discovered cases of tuberculosis, regardless of anatomical location or extent of the disease.

It is unfortunate, but the drugs must be given over long periods of time, primarily because, as emphasized earlier, tubercle bacilli are such slow dividers. For example, one can sterilize

the throat of beta-hemolytic streptococci with penicillin in one week, while it takes at least 12 weeks to sterilize all the tubercle bacilli in an open tuberculous ulcer even with the very best combination of anti-tuberculous drugs in highest tolerated dosage. Thus, though highly successful in the great majority of cases, the treatment of tuberculosis today is a very expensive affair, averaging five to ten thousand dollars per case, even if one excludes the economic loss in the case of an adult. Therefore, much effort has been expended in attempts to discover practical means of prevention of this disease.

Efforts at Prevention

At the risk of great over-simplification, let me summarize the results of these efforts as follows:

1) The early detection of every case of infectious tuberculosis, i.e., sputum-positive tuberculosis, has been attempted. Except in very limited areas, in population groups under rigid control, it has been impossible to achieve more than 50% success at best. Voluntary mass x-ray surveys don't do the total job; neither does careful follow-up of contacts of recent tuberculin converters, though both of these approaches help, and we cannot afford to give them up.

2) Many attempts at forcible, legally controlled isolation of infectious cases have been made, but this is surely not the practical answer so long as human nature remains what it is. I need only to point out that in those areas where such attempts have been made, new cases of tuberculosis simply are not reported to the official public health agency; the physician still feels some responsibility, thank God, for the psychological integrity and the personal dignity of his patient, though he may have at the same time the keenest sense of responsibility for the public health. I do not mean to imply that the psychopathic recalcitrant who could fairly, in everyday language, be termed a criminal in his flagrant disregard for the welfare of others, should not be forcibly detained.

3) Back in our time machine again: Doctors Calmette and Guérin in France have announced development of a vaccine consisting of living attenuated tuberculosis germs, called BCG; and there is much pressure for a wider use of this vaccine to prevent tuberculosis. There is no doubt that this vaccine, properly prepared and administered, can confer some acquired immunity against tuberculosis. However, it does not prevent infection with virulent tubercle bacilli; and under the very best conditions it certainly provides no better than 80% protection against the development of tuberculous disease. True enough, we freely use other vaccines which are no better than this. However, in the production of immunity, this vaccine confers an allergy to Koch's tuberculin. Consequently, there is loss of the useful tuberculin test for epidemiological and even more importantly today, for diagnostic purposes; we lose the most precious tool we have for detecting this treacherous infection. And these uses of the tuberculin test are becoming increasingly more important. Mass vaccination has been practiced in Scandinavia for many years. Its discontinuance is being suggested by those very individuals who introduced it there. Nevertheless, certainly in those individuals or groups in whom repeated tuberculin skin tests cannot be performed, for one reason or another, it is obvious that BCG vaccination is indicated today.

4) Evidence both from extensive animal studies and from some clinical studies has shown that chemotherapy—even with isoniazid alone—can give some protection against the subsequent development of tuberculous disease in individuals who have recently become allergic to tuberculin, or who are highly allergic to tuberculin when first discovered.

A Method for Control

It would not be appropriate for me to try to recount all the technical details, and to discuss the prevailing opinions and practices, relevant to the diagnosis, the treatment, and the prevention of tuberculosis. Suffice it to point out that, although the epidemic is waning, still about five out of every one-thousand Kentucky children are becoming newly infected with tubercle bacilli every year. While we cannot hope to accomplish much in the way of prevention, in view of the many adults who are already infected, we nevertheless can envision the ultimate situation in which tuberculosis will really become a minor disease in this country *if we will only do tuberculin skin tests* on every child as often as possible, treat the recent converters and the strongly tuberculin-allergic with maximally tolerated dosage of isoniazid and vaccinate all tuberculin-negatives who cannot be followed up.

THE ROLE AND FUNCTION OF THE NATIONAL EYE BANK*

Donald M. Shafer, M.D.

New York City, N. Y.

THE Eye Bank for Sight Restoration, Inc., was organized in 1944, when a group of qualified surgeons realized that the availability of corneal tissue for the corneal transplant operation depended on an established source of supply. This was the first such organization to be created in this country.

The original objectives of the Eye Bank were to educate the public as to how they could donate their eyes at time of death, and to develop techniques for transportation, handling and storage of the eye material.

As time passed and the supply of eyes increased, the objectives of the Eye Bank were enlarged to include research, medical education and teaching, and the establishment of affiliated eye banks elsewhere in the country.

The results of the first twelve years of the Eye Bank have abundantly demonstrated the soundness of the original purpose for its founding. During the past twelve years the Eye Bank has received and processed 5,320 human eyes.

The present activities of the Eye Bank may be divided into administrative, processing, research, and medical education and teaching.

Administrative Functions

As the procurement of eyes is a basic function of the Eye Bank, and the fact that the present supply falls far short of the demands of the eye surgeons, the office staff of the Eye Bank spends much of its efforts towards national education of the public to donate their eyes to the Eye Bank. This, of course, entails contact with the press, radio, television and magazines to gain national coverage for the work of the Eye Bank. It means contact with organizations such as the Lions Clubs with their great interest in helping the blind. Also, it means much correspondence with individuals inquiring about how to donate their eyes at time of death. It means speeches, conferences and meetings to get people to sign the eye donation pledges. Last year over 26,000 more people pledged than over the year before. It means getting people to understand that they just can't donate their eyes in their will.

I don't know about the legal problems here in Kentucky, but in New York by the time a will gets to probate, those valuable eyes of the deceased have long since in fact departed. A person leaving his eyes to the Eye Bank gives directions to his next of kin or executor to have the eyes given to the Eye Bank. A printed eye donation pledge is available from the Eye Bank that can be quickly signed by anyone wishing to give his eyes. We wish that every doctor, when he thinks of getting an autopsy permit, would try to get permission to secure the eyes for the Eye Bank.

Enucleation Procedure

Many doctors are hesitant about the enucleation procedure. Really it is very simple and doesn't disfigure the body in any way.

I will review the technique of enucleation which starts the wonderful chain of events that may save someone's sight. The only instruments needed are small scissors and forceps and one moderately large curved scissors. Also, there should be a sterile wide-mouth bottle or jar to hold each eye and some cotton. A lid speculum is a help, if available.

The first step is to cut through the conjunctiva all around the cornea, then each of the four recti muscles are located with the point of the scissors or with a small hook, if available. As you will recall, they attach to the eye above, below and on each side about one half inch back of the edge of the cornea. They are cut through.

The eye may then be lifted up somewhat so that the larger curved scissors can be slipped behind the eyeball. The nerve should be located by moving the tips of the closed scissors, then the scissors are opened and the nerve cut. It is easiest to do this from the nasal side. The eye is then lifted and the remaining tags of the retrobulbar tissue are cut off. There is usually no bleeding as, of course, there is no blood pressure. Any oozing is readily stopped by pressing some cotton down into the socket. The mortician may wish to have the cotton soaked in 10% formalin. A cotton ball is placed so that the lids, when closed, resume their normal contour. The eyes are then placed in the wide-mouth bottle, cornea up, on a ring of cotton moistened with sterile saline or water. Special

*Presented at the Annual Meeting of the KSMA on September 17, 1957.

bottles are available from the Eye Bank without charge. In any case, it should be labeled as to donor's name, address, age and cause of death. The bottle should then be placed in a container and packed with ice. Thermos jugs for shipping are available from the Eye Bank or from the nearest Eastern airlines office. The iced container should be addressed to the nearest eye bank or the National Eye Bank for Sight Restoration in New York.

Delivery to Eye Bank

A collect telephone call to the Eye Bank should be made to notify them that the eyes are available. They will give you information as to how to send the eyes. Usually, however, the Red Cross sends a driver to pick up the container and take it to the nearest eye bank or to the nearest air terminal with connections to New York. Eastern Airlines will carry the eyes without charge, otherwise they should be sent by air express collect. The Red Cross will meet the plane at the other end and carry the eyes to the Eye Bank. The arrangements for the pickup and delivery will be made by the Eye Bank after you notify them about the eyes.

An important point, of course, is the timetable of the eyes. They should be enucleated within eight hours after death and should be received by the Eye Bank preferably within thirty-six hours after death, as they must be processed and then sent on to the operating surgeon. If in doubt about their suitability, send them anyhow, as they can be used to save sight by other means than the corneal transplant, as will be discussed under the research functions of the Eye Bank. Some of the travels of the eyes are miraculous. In one instance an eye was enucleated in Detroit, flown to New York, processed and flown to Houston, Texas, and a corneal transplant performed all within forty-eight hours, about the maximum interval.

All this is possible through the wonderful cooperation of the American Red Cross Motor Corps and the Airlines, without which the Eye Bank could hardly function. Especially helpful has been the Eastern Airlines System where every manager has standing instructions to have the insulated eye containers on hand at all times. One time, at their own expense, this airline chartered a small plane to fly eyes out of a small town off their route and convey them to their nearest regular terminal so the big liner could pick them up. A Red Cross Motor Corps driver met the plane in the middle of the night and rushed the eyes to the Eye Bank. That's cooperation.

Another phase in the Eye Bank administration is the development of affiliated eye banks. Four new ones were organized this year, of which the closest is the Cincinnati, Ohio Eye Bank. Here in Louisville, through the cooperation of the Lions Club and the Louisville Medical School, plans are under way for the establishment of an eye bank. The development of the high professional standards of the affiliated eye banks and an integrated program for public education goes on continuously.

Processing Function

When an eye is received at the Eye Bank laboratory, it is recorded as to time interval from enucleation, name, sex and age of donor, diagnosis and the doctor or hospital that secured the eye. The eye is then inspected grossly or with the biomicroscope to determine its suitability for corneal transplant, vitreous storage or glaucoma research or a combination of these sight saving techniques. Every eye can mean the restoration of someone's sight. According to the condition and characteristics of the eye every eye is assigned its best use. It is then cultured, bathed in antibiotic and sent to a surgeon on the waiting list for a corneal transplant case or the vitreous is removed for a retinal detachment case. The eye, after the surgery, is returned to the laboratory for histological study.

Research Function

In the laboratory of the Eye Bank a research program is carried on based on two general principles: First, is the development and improvement in methods of corneal transplantation and in surgical techniques for the removal of other defects of the eye; second, is the utilization of the spare parts of the eyes which have been used for corneal transplanting or other purposes in order to increase the scientific knowledge of the structure and actions of the eye.

The progress made through their research program is highlighted by the following scientific developments:

1) The study of morphological changes in vitreous in relation to retinal detachment, which culminated in an exhibit, winning first prize, at the 1955 meeting of the American Academy of Ophthalmology and Otolaryngology.

2) The development of the vitreous implant technique for treating retinal detachments was presented to the American Academy at their

1956 meeting. Now the demand for vitreous far exceeds the supply.

3) The study of glaucoma with emphasis on the primary degeneration of the chamber angle. An exhibit on this work was awarded second prize at the 1954 Congress of Ophthalmology.

4) The study of ciliary bodies and keratoconus is being undertaken.

The research program is being strengthened by the installation of a new electron-microscope made possible by the donations to the Eye Bank and the cooperation of the Manhattan Eye, Ear and Throat Hospital.

Medical Education and Teaching

A weekly corneal clinic is held, which is attended by Dr. Townley Paton and his staff, where patients with corneal diseases are assembled before and after corneal transplantation and where doctors from all over the world come to study.

A retinal clinic is held, with cooperation of Manhattan Eye, Ear and Throat Hospital, where retinal detachment cases are studied with a view to surgery by the vitreous implant technique.

Five eye residents of Manhattan Eye, Ear and Throat Hospital are each year given three months training in retinal detachment surgery including the use of the vitreous implant technique. Many of the clinic cases are seen without charge for either examination or surgery.

Teaching courses are, also, carried on in the Eye Bank laboratory, where every year a formal course of training is made available to competent eye surgeons to learn how to do the corneal transplant.

In conclusion then, I have reviewed the multiple functions of the Eye Bank and I trust you see how important is the role of every doctor, not just the ophthalmologist. Without the doctor present at the scene to secure the eyes, the whole chain of events can't happen. I urge you to try and encourage pledges and to send eyes to the Eye Bank.

Manuscript Memos

Manuscripts should be submitted in duplicate to The Journal of KSMA, an original copy and one carbon, and typed with double spacing. Maximum length of an article should not exceed 4500 words, and the Board of Consultants on Scientific Articles prefers that they be briefer than this when possible.

Footnotes and bibliographies should conform to the style of the Quarterly Cumulative Index Medicus published by the American Medical Association. This requires in the order given: name of author, title of article, name of periodical, with volume, page, month—day of month if weekly—and year. The Journal of the KSMA does not assume responsibility for the accuracy of references used with scientific articles.

All scientific material appearing in The Journal is reviewed by the Board of Consultants on Scientific Articles. If illustrations are submitted with a paper, The Journal will assume the cost for the first three one-column width half tones. The cost of additional illustrations will be borne by the essayist.

Arrangements for reprints of an article should be made directly with the publisher of The Journal, Gibbs-Inman Printing Company, 817 W. Market St., Louisville, Ky.

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Please mail your scientific articles to The Journal of the Kentucky State Medical Association, 1169 Eastern Parkway, Louisville, Kentucky.

VIADRIL: ITS USE WITH SPINAL ANESTHESIA*

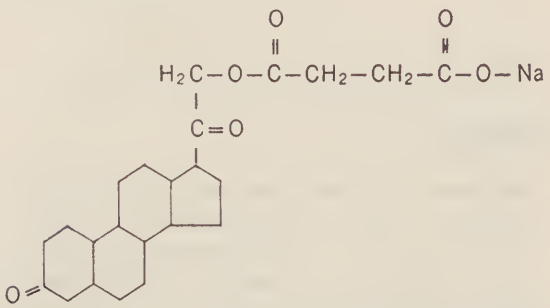
Warren H. Ash, M.D.

Louisville

VIADRIL®, first introduced clinically in 1955 by Murphy, Guadagni, and DeBon,[1] was used as a basal anesthetic agent in conjunction with nitrous oxide and oxygen. Since then, several articles have appeared extolling its virtues in general anesthesia.[2, 3, 4, 5, 6] Since, in all instances, it was used as a substitute for an intravenous barbiturate, it was thought that perhaps this agent could be used as a supplement to spinal anesthesia. In this way, perhaps we could avoid some of the complications inherent in the barbiturates such as coughing spasm, laryngospasm, bronchospasm, respiratory depression and prolonged recovery.

Properties of the Drug

Viadril is a steroid, hydroxydione sodium, supplied as the succinate ester, 21-hydroxy pregnane-3, 20-dione hemisuccinate with the following structural formula:



It is the best of the steroid hormone derivatives that has been developed since the initial work of Selye in 1941.[7] He was able to show that in animals some of the steroids exerted a hypnotic effect. This initial hypothesis was substantiated by Hoeffer and Glaser[8] in 1950 by showing electroencephalographic changes suggesting cortical depression during ACTH therapy. After thorough investigation of many of the steroid hormones, hydroxydione sodium proved to be the most satisfactory. No hormonal activity has been found. In therapeutic doses, Viadril shows no toxic effects on vital organs; it does not interfere with the excretion of salt. The agent is non-explosive and reported to be stable.

Physically, the drug is a white crystalline powder. It has a molecular weight of 454. It is soluble in water and produces an alkaline solution with a pH of 8.5 to 9.8 in a 2½% concentration, and a pH of 7.8 to 8.0 in a 0.2% concentration.

Method of Use

In most of the clinical studies to date nitrous oxide or cyclopropane and oxygen were the supplemental agents.[2, 3, 4, 9, 10, 11, 12] In abdominal cases much less muscle relaxant was needed. Burstein[2] used Viadril in a 0.1% solution in preference to the originally recommended 2½% solution. All types of surgical procedures were performed on 500 cases. Nitrous oxide and cyclopropane were the supplemental agents. Weiss and Wallach[6] used Viadril for head and neck surgery in a series of 50 cases. Briefly, their procedure was as follows: an intravenous was begun with 5% glucose and water. One gram of Viadril was inserted into the tubing as far away from the needle as possible, with the intravenous running rapidly. After seven minutes, the nostrils were sprayed with Cyclaine® 5%. Two minutes later, the patient was intubated through the nose. Ten of the fifty patients were given succinylcholine for relaxation at the time of intubation. Immediately after intubation, nitrous oxide and oxygen were adminisered in a 6:2 ratio. Small amounts of trichlorethylene were also given with the nitrous oxide. This was occasionally repeated during the case. These are two examples of the way in which Viadril has been used. It has proved to be an interesting hypnotic agent.

Advantages and Limitations

The advantages reported are primarily due to the marked depression of laryngeal and pharyngeal reflexes which is produced. In several instances, the degree of depression reported was such that even endotracheal intubation could be performed without additional relaxing agents, topical anesthetic agents, or deep anesthesia. This advantage is particularly applicable to head and neck surgery. In addition, induction is smooth and a prolonged effect is produced, much like natural sleep. A reduction in the amount or even the need for muscle relaxants was demonstrated. There were fewer cases in which there was a need for deep anesthesia with its concurrent respiratory depression and car-

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diac complications from hypoxia. Finally, a euphoria was produced which lasted well into the post-operative period.

One of the major limitations is the time involved in producing the desired effect. It was necessary to allow at least ten minutes and usually twenty minutes for this effect to become established. This was borne out in our supplement-to-spinal studies. A second limitation is the venous irritation and even thrombophlebitis at the site of injection. This could be avoided in one of several ways. A dilute 0.1 to 0.2% drip can be used, the more concentrated 1.0 to 2.5% solution can be injected into the tubing of a fast running intravenous, and, with either solution, there is less risk of vein damage if the antecubital veins are used instead of the hand veins.

The final conclusion in the literature is that Viadril adds a measure of safety to a gas-oxygen anesthetic. It is particularly suited to head and neck surgery, surgery of the poor risk patient and endoscopy.

Method

Initially, the plan to be followed was to perform the spinal tap, turn the patient into supine position and then start a Viadril drip of a 0.1% solution in 500 cc. of 5% glucose and water. Several fallacies were immediately discovered. First, most of our patients expressed a strong desire to be asleep immediately after the insertion of the spinal needle, or the surgeon wished this to be so. This was impossible with Viadril due to the prolonged onset time. Secondly, the 0.1% solution required a flow rate which was so great that there was the definite danger of overloading the patient with fluids. These two objections were met by injecting about 500mg. of Pentothal® to produce the immediate sleep desired. This gave the Viadril more time in which to act. The concentration of Viadril was increased to 0.2% in order to reduce the amount of fluids administered. The use of Pentothal is a compromise with admitted objections, but a compromise which had to be done under the conditions in our operating rooms. In retrospect, another method of compromise might have been to start the intravenous before the spinal tap was performed permitting the Viadril to begin its action while the spinal was being administered.

Results

With the Viadril administered as described, a total of twelve cases were investigated (Table No. 1). It was found that an average of 537 mg. of Pentothal was needed to keep the patient asleep prior to the onset of Viadril hypnosis. The range was from 250 mg. to 1000 mg. The average time to produce this Viadril hypnosis was 11 minutes. The range was from five to twenty minutes. In the last ten cases, during which the 0.2% solution was used, additional Pentothal was needed in three cases, 1000 mg. in one instance, 100 mg. in the other two cases. The average total time of Viadril administration per case was 74 minutes with an average dose of 788 mg. Therefore, the Viadril was administrated at an average rate of about 10 mg. per minute.

A careful evaluation of blood pressure, pulse rate and respiratory rate and depth was made on each case. In half of the cases, no changes were noted. In the other six cases a tachycardia of from mild to moderate degree was noted. The change ranged from ten to sixty points. The blood pressure fell in one case and rose in another. Neither change was of any great magnitude. No change was noted in respiratory rate or depth.

In two of the twelve cases, severe side effects were noted. One patient showed excessive salivation, coughed on the nasal airway, and then went into a severe coughing spasm followed by a two plus laryngospasm. The second patient developed a severe urticaria combined with moderate shock. The latter was due to inadequate blood replacement. This patient had a strong allergic history.

Recovery time was noted in all cases. This is defined as the length of time from the end of the operation to a response to the spoken voice. This varied from thirty minutes to 240 minutes with an average of 95 minutes. Six of the patients were mentally clear and acutely aware of their environment on awakening. The other six were hazy and retained a cloudy sensorium for some time. This may or may not be advantageous—it was certainly distressing to the floor nurses who expect our patients to be awake very quickly.

Discussion

Viadril has been used clinically for many types of cases. Since it has been reported to have several advantages when used in place of the intravenous barbiturates, it was elected to use it to supplement spinal anesthesia. The advantages reported in previous articles were not found in this situation. Two cases showed defi-

TABLE I

CASE NO	OPERATION	TIME Minutes	PENTHOTHAL (mg.) Before Viad.	PENTHOTHAL (mg.) With Viad.	PENTHOTHAL (mg.) Amount	VIADRIL (mg.) Time (min) Onset	VIADRIL (mg.) Time (min) Total	Changes in B.P. Pulse & Respirations	RECOVERY PERIOD Time (Min)	RECOVERY PERIOD State of Sensorium
1	Ventral herniorrhaphy	105	250	1125	750	20	95	0	60	Cloudy
2	Hysterectomy and Appendectomy	155	500	350	1500	10	90	Tachycardia 106-144	120	Clear
3	Hysterectomy and Appendectomy	70	500	0	600	10	60	0	240	Clear
4	Cholecystectomy and Appendectomy	90	500	0	250	10	60	Tachycardia 110-140	30	Clear
5	Hysterectomy	135	500	0	1000	5	120	0	60	Cloudy
6	Cholecystectomy	70	750	0	1000	10	50	Tachycardia 120-130 B.P.100/60-85/50	60	Cloudy
7	Hysterectomy	80	500	1000	800	20	45	Tachycardia 90-150	60	Clear
8	Hysterectomy & Salpingo-oophorectomy	140	1000	0	900	20	120	0	180	Cloudy
9	Pelvic Laparotomy	40	600	0	250	5	25	Tachycardia 100-114 B.P.120/64-138/80	30	Clear
10	Hysterectomy & Bilateral Salpingo-oophorectomy	135	500	100	600	8	95	0	150	Clear
11	Hysterectomy	90	400	0	600	7	50	0	60	Cloudy
12	Vaginal Hysterectomy and A-P Repair	135	500	100	1200	5	75	Tachycardia 100-110	90	Cloudy
AVERAGES		104	537		788	11	74		95	

COMPLICATIONS: 2 Excessive salivation, coughing, laryngospasm
12 Severe urticaria and moderate shock

nite laryngeal stimulation, one mild with cough, one severe with laryngospasm. The onset of sleep was more prolonged than was practicable. The recovery time was also too prolonged, running into the risk of pulmonary complications. In addition to these objections, it was found to be difficult to mix the drug even into a 0.2% solution, which would turn cloudy within twenty-four hours.

Finally, then, Viadril has not been found satisfactory for use as planned in this study. This does not mean that it is a wholly unsatisfactory drug. We have used it under the conditions previously described in the literature and with good results. In addition, it must be said that this study is not wholly fair to the drug since it was used in only twelve cases and the speed of onset was given a position of perhaps undue prominence.

Summary

Viadril, the newest intravenous hypnotic agent, a cortisone derivative, has been used as a supplement with spinal anesthesia. An average of 788 mg. was used for an average of 74 minutes. The onset of action averaged 11 minutes. Recovery time averaged 95 minutes. Due to technical difficulties (primarily slowness of action) Viadril was found to be unsatisfactory as a supplement for spinal anesthesia in the active private practice of anesthesia.

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REACTIVE AND RETROACTIVE REBELLION*

EDMOND F. ERWIN, PH.D.
Louisville, Ky.

THE period of adolescence—or perhaps we should say the process of adolescence—has been described in its various aspects by many writers, both scientific and literary. The texts by Cole[2] and Garrison[4] on adolescent psychology which have been well received through the years include material on the emotional changes of adolescence. The process of emancipation from adults, the weaning away from binding emotional ties with parents, the repudiation of adult values, the acting out of tensions caused by frustrations, the formation of close group ties; these have all received ample attention.

However, in considering this process a cross-sectional view has been the usual approach and a segment of behavior has been scrutinized in isolation rather than as part of a continuing growth process. In contrast to this molecular viewpoint Josselyn[7] stresses that adolescence is a stage of emotional growth which cannot be avoided if adulthood is to be attained. She also states that adolescence may be prolonged as the individual seeks either a healthy or a neurotic solution to his conflicts but that it cannot be too greatly foreshortened without serious adverse effects. Redl[9] distinguishes between "developmental defiance" which is a manifestation of the usual emancipation efforts of the young adolescent and "reactive defiance" which is the protest of the adolescent against the misguided and bungling efforts of adults in dealing with youthful behavior.

Normal Growth Process

Whether we focus on the developmental aspect and think of the individual's struggle for autonomy and self-realization or whether we emphasize the protest against enforced dependency as a part of the emancipatory process, we should regard the rebellion of the adolescent as a stage in the normal growth process. We should also be cognizant of the salutary aspects of this reactive rebellion and the purpose it serves for the adolescent in finding himself as an individual with his own internalized values and standards. We would agree with the assertion that rebellion is the common ground on which man bases his first values.

Granting that the above be true, what happens to the individual if the process is forestalled or greatly foreshortened? If, for example, the individual is in effect cheated out of adolescence, what are the consequences? Among psychiatric patients there has been noted a particular reaction which occurs to some adults and for which the term "retroactive rebellion" seems appropriate. The reaction is quite stormy and may involve acting out behavior of some severity. It has many of the elements considered typical of adolescent behavior including denial of previously held values and repudiation of the meaningfulness of the present situation.

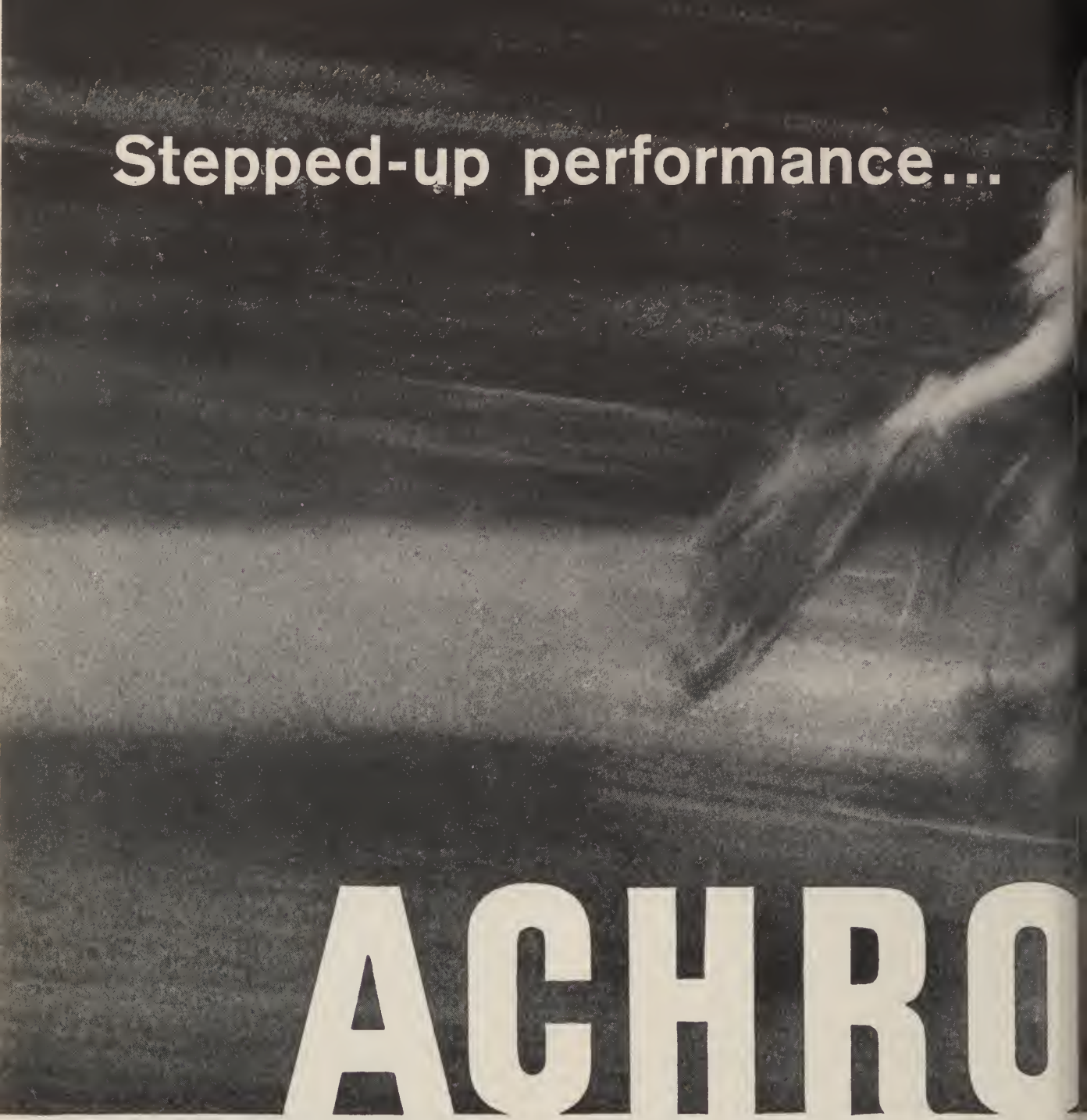
Frequently, the protests of the individual have paranoid overtones, or they may be patently paranoid in nature. The reaction has been preceded by a long period of seemingly normal life during which the individual has been patient and tolerant and generally conforming to conventional behavior, even in the face of provocation to act otherwise. Apparently stimulated by factors which arouse old unresolved adolescent conflicts, the individual abruptly lets go or breaks down, and there results an acute situation in which the behavior already described is manifested. It is as if the process of self-realization or of self-fulfillment must prevail. The individual behaves as if autonomy and self-direction are preferable to life itself. In fact, depressive trends and suicidal attempts or gestures frequently occur. The individual who has been willing to compromise previously and to deny his own needs now acts as if it is "all or nothing at all."

Retroactive Rebellion

The following is a description of a female patient who demonstrates the behavior described as retroactive rebellion:

The patient was a 32-year-old housewife. She was the second oldest of four children of an unhappy marriage. Her father drank to excess and was a poor provider. Her childhood was quite unhappy because of conflict between her parents, and repeated threats of separation and divorce made for insecurity. As a child the patient was given the responsibility for looking after her younger brother and sister while her mother worked. She felt rejected by her father

**Presented at the meeting of the Kentucky Psychiatric Association at the KSMA Annual Meeting in Louisville on September 18, 1957.*



New rapid-acting ACHROMYCIN V Capsules offer more patients consistently high blood levels—at no sacrifice to the broad anti-infective spectrum of ACHROMYCIN Tetracycline, its low incidence of side effects, or its dosage and indications.

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and overly controlled by her dominating mother. At age 16 she ran away from home and married a rather ineffectual man who was some four years older than herself. This was an extremely stormy marriage, both patient and husband being quite dependent on each other yet unable to give to each other. Bitter arguments were frequent. She soon had two children and after an interval of four years, she had two more. After some fifteen years of turbulent marriage she broke down.

Her presenting complaints included irritability and repeated severe temper outbursts in connection with her inability to get along with her husband and in addition, a marked depressive trend. She was ambivalent about psychotherapy but responded well to treatment as an out-patient over a 6 months' period.

The significant features of this case history are the sense of rejection in childhood, the escape from the unsatisfying home conditions into early marriage, the unrealistic expectations of marriage and consequent marital discord, and finally the protest against the intolerable conditions and the struggle for a more satisfactory way of life.

It appears as if the person was shouldered with responsibility at an early age. Apparently she accepted this responsibility for the moment but thought in terms of escaping from it as well as from the general unsatisfying home conditions as soon as possible. When the opportunity arose she abruptly fled from the situation into and adult world for which she had not sufficiently matured and in which she was not ready to participate.

Dynamics

Undoubtedly the dynamics have a familiar ring. The explosive reaction and disrupted behavior could be explained in many ways. For example, Selye's[10] General - Adaptation - Syndrome might be applicable in which case the patient would have reached the stage of exhaustion as the adaptation to prolonged stress could be maintained no longer. Or the behavior might be considered as an example of character change in adult personality development, following the approach of some German Characterologists. Some of this work using both sociological data and biographical analyses has shown that the period between thirty and forty years of age is one of serious breakdown and very rapid changes. Probably more often it would be regarded from a Freudian viewpoint as part of an hysterical pattern in which the defenses of repression and denial had broken down. It might be explained from psychoanalytic theory according to Erickson's[2] thinking as the emergence of a sense of ego-identity. Erickson stresses the value of the stereotyped, clannish, and intolerant behavior of the adolescent as a defense against a sense of self-diffusion, and points out the disturbing and disturbed behavior which results from role diffusion.

In any event, there would seem to be real value for the patient if greater emphasis could be placed upon growth as a psychological as well as a biological and physiological process. Psychological growth as a process of integration and organization making for spontaneity and creativity and optimum self-development might well receive more attention. Fromm[3] refers to growth and productiveness as the "primary potentials" of man, and to defense mechanisms and destructiveness as a secondary "potentiality" that comes into manifest existence only in the case of abnormal, pathogenic conditions. Similar views have been strongly emphasized by Goldstein[5], Sullivan[11], Horney[6] and Murphy[8].

It would seem of utmost importance in the consideration of a particular patient if the approach was one which regarded the present behavior as a set-back in a positive growth process in contrast to one which regarded it as the failure of inadequate resources to cope with insurmountable pressures. It would seem most vital to think in terms of capitalizing upon inherent strengths and growth potentials to assist the patient to realize optimum effectiveness and comfort.

In particular, for an understanding of patients who fit the pattern described in this paper, it would seem essential to think in terms of assertion of growth potential, of accruing ego-strength, and of the accretion of psychological forces making themselves felt in a delayed, retroactive and dramatic adult form.

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(Continued on Page 172)

CASE DISCUSSIONS

From The

University of Louisville Hospitals

A CASE OF SALICYLATE POISONING

Louisville General Hospital

HISTORY: J. H., a three-year-old, white, female was admitted to the Pediatric Service on November 11, 1957 with the chief complaint of "Trouble breathing."

This three-year-old white female was in her usual state of health ten days prior to this hospital admission. She and her twin and their older sibling were then placed in the care of their maternal grandmother, as their mother was confined for childbirth. At that time the grandmother noted that all three children had what she considered to be a "cold." Each child was given an unknown quantity of "Pepsin" and a "regular" aspirin twice a day for the next six days. During that period there was no reported change in their condition. At 3:00 P.M. on November 11, 1957 this patient was found with an empty bottle that was known to have contained an undetermined number of adult aspirins. Two or three hours later the child appeared much "sicker" and began vomiting profusely. The patient was taken to a local hospital and transferred immediately to this service.

It should be noted that the recorded history was available only the day after therapy was instituted. The remaining parts of the previous medical history were non-contributing to the diagnosis of this condition. The family and social history indicate that anticipatory guidance for this mother would be in order.

PHYSICAL EXAMINATION: At the time of admission to this service the child was comatose and did not respond to painful stimuli. She was hyperventilating at a rate of 50-60 per minute, and while being examined began to have jerking movements of the extremities and a grunting respiration. A tachycardia of 200 per minute was noted. Fine rales were noted in both lower lobes. All of the keep tendon reflexes and the superficial reflexes were depressed. The pupils were equal and did not respond to light. The child appeared dehydrated, and her breath had an odor of acetone. The remainder of the physical examination was within normal limits.

HOSPITAL COURSE: Because of the child's critical condition resulting from the obvious hyperventilation, a cut down was done on an ankle vein immediately. Blood specimens were obtained for laboratory studies, and an intravenous drip of 1/3 Normal Saline in 5% Glucose water was started. In the absence of a history and in light of the physical picture, a working diagnosis of hyperventilation, possibly due to salicylism, was made. Ten per cent calcium gluconate was given intravenously without effect upon the convulsions. Intravenous Sodium Amytal did control these convulsions. The following laboratory data was reported: pH-7.18, CO_2 content-7mEq, Salicylate level-55.8 mgm %, 4+ urine acetone and a strongly positive urine test with Ferric Chloride. The working diagnosis was then confirmed. An emergency exchange transfusion was considered, but the child developed pulmonary edema which necessitated digitalis and mercurial diuretic therapy. The fluid replacement was continued by necessity without much change in the child's condition. A recurrence of the convulsive state necessitated more sedative therapy. Several hours later (8:00 A.M., November 12, 1957) the child's pupils reacted to light and a slight improvement was observed. However, very shortly thereafter the child became apneic, and artificial respiration was necessitated. A tracheostomy was performed and positive pressure resuscitation was carried out by a Bennett positive pressure apparatus. Hibernation was instituted and the fluid therapy was markedly reduced in keeping with the reduced metabolism. On November 13, 1957 the condition worsened and the child became oliguric, and it was necessary to maintain oxygenation with oxygen and hand resuscitation with a breathing bag. The child expired on November 13, 1957.

The post-mortem examination (both gross and microscopic) was consistent with heart failure and cerebral edema associated with salicylate poisoning.

CASE DISCUSSION: The experience of the Louisville Poison Control Program is adding supporting data to the contention that accidental poisonings are preventable. The incidence of the ingestion of potentially toxic agents in our area is startling. Salicylates, including aspirin, are the major offenders in the U. S. A., and our local experience differs only slightly in that the pesticides and kerosine are equally prominent offenders.

This case serves to emphasize several well-known facts about salicylate usage as well as the therapy for poisonings. Aspirin has been recognized for many years as very tricky medicinal agent in the pediatric age range. Aspirin is virtually unpredictable during the first year of life. Salicylism can and does occur frequently in this age group, without relationship to the dosage. Beyond the first year salicylate medications should be restricted to a limited number of doses with careful observation on the part of the attending physician for evidence of salicylism.

It cannot be overly emphasized that infections markedly decrease a child's tolerance of salicylates. Unsupervised use and repeated doses of aspirin contribute all too frequently to iatrogenic cases of salicylism. It is rather startling to learn that a review of any series of salicylate intoxications will reveal well over 50% occurring as a result of specific medication, often under the physician's eyes.

This particular case emphasizes a twofold aspect of salicylism, as this child received repeated "medicinal" doses of aspirin over a span of several days, and is also strongly suspected of having ingested a single large dose left within reach.

The House Staff is to be complimented for being alert to the possibility of salicylism from the observation of hyperventilation, despite the absence of an adequate history at the moment.

The immediate therapy was designed to meet the altered physiology of this individual case. Hyperventilation from any cause results in a respiratory alkalosis early as a result of the loss of CO_2. The associated water loss is marked causing dehydration and hyperelectrolytemia and eventual acidosis. In this case the lowered CO_2 content is indicative of either stage, but the pH verifies the acidosis. Interestingly, even in the presence of alkalosis, sodium bicarbonate will enhance the excretion of salicylates. The major loss, however, has been the insensible water lost by hyperventilation. The glucose solutions given IV were designed to meet this loss. As tetany is often the result of alkalosis the calcium gluconate was designed to combat the possibility before the chemistries were known. The lack of clinical improvement until amytal was introduced ruled out tetany. The first stage of therapy was therefore designed to combat the known water loss and superimposed convulsions. An exchange transfusion was considered as the "poor man's" artificial kidney, but technical difficulties in the presence of pulmonary edema prevented its use. The usual therapy for pulmonary edema was introduced.

The apneic episode necessitated maintenance of cardio-respiratory exchange. An open airway was established and positive pressure artificial respiration was introduced to provide a CO_2-0_2 exchange. Obvious respiratory difficulty always suggests hypothermia for protection of the central nervous system by reducing the oxygen requirements. Hypothermia in turn reduces the normal water requirements. The reduced respiratory water loss further reduced the water requirements.

The entire approach to this case illustrates the need to individualize the care of all poisoning cases. In the past emphasis has been placed upon the search for specific antidotes. It is now well established that the principles of dilution and evacuation when possible is the primary step in therapy followed by the physiologic correction of the signs and symptoms that arise.

ALEX J. STEIGMAN, M.D.: As has been discussed the advancing knowledge in the therapy of poisoning cases emphasizes the need to individualize the case with a physiological approach to the symptoms and signs.

Of even greater importance are the prophylactic considerations. Much more can be accomplished by prevention through education. The interest in poison control has shown that the toddler is the susceptible child. The medical and lay public must be made aware of the risks at that stage of development. An appropriate mixture of protection and education must be developed in each home to prevent such accidental occurrences, and the medical profession must constantly be aware of the dangers of certain medications.

In summary the approach to accidental poisoning is:

I. Prevention through education and pro-

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EDITORIALS

Have We Replacements?

IT would appear that death exacted a heavier than usual toll of Kentucky physicians during the year just passed and as ever has been true there was no respect as to age, station or place of residence. The sagacious old family physician and counsellor has packed his little bag, smiled confidence and hope to his stricken neighbor and gently departed, to return no more. The instructor has demonstrated his clinical observations to his eager students and left them to other teachers. The surgeon has laid down his gown and his matchless skill to answer an insistent call. The medical statesman, who found an answer to many of our perplexities, has left his current problems unsolved to accept from his Master a new assignment.

Will there be found among us those who will be able to fill their places? Will the torch of light, and healing, and faith which they have carried smolder on the ground where it fell from their hands, or will some one younger and stronger carry it on?

The brightest promise of our profession is that there are always leaders in the making. They are better trained in the technicalities of medicine, better educated in the wider fields of knowledge, better adapted to the changing socio-economic patterns of our day. They will need the convictions of purpose and the dedication to service their predecessors acquired thru a lifetime of living among people. But they will be better physicians, better teachers, better surgeons and better statesmen, and we will continue to grow and serve in the best traditions of the past. Ours is not a decadent profession. Our younger men hold greater promise than the revered physician of yesteryear or those of the present generation.

Sam A. Overstreet, M.D.

Needed—Medical Statesmanship

ON December 3, 1957 Dr. David B. Allman, president of the A.M.A. addressed the House of Delegates upon the occasion of the Associations clinical meeting in Philadelphia. He dealt so directly and so clearly with some of our current problems that the council of K.S.M.A. requested that some report of his talk be carried in our editorial pages.

Said Dr. Allman: "I believe that freedom is a never-ending struggle, requiring the energy of each citizen no matter what his station in life. Our lives, our futures and our hopes are dependent upon the preservation of freedom. We have a duty to perpetuate it. If we fail in that duty, our republic will perish, bringing an end to a system of government that has brought more good to more people than has ever been known.

"There are many so-called easier ways, of course, of providing more good to more people than the free enterprise method, but they initially or eventually involve bigger and bigger government and inevitably lead to the exchange or forfeiture of our God-given rights.

"The latest promise of a better life for more people comes to the American people in an attractive, but ill-directed expansion of Social Security benefits.

"This proposed legislation, introduced by Rep. Forand (D. - R. I.) in the first session of the 85th Congress, would provide hospitalization and surgical benefits to all old age and survivors insurance beneficiaries. If passed, the federal government would withdraw Social Security taxes on a compulsory basis from almost the entire working population and use those taxes to reimburse hospitals and physicians for services rendered to all persons—some 12 to 13 million—eligible to receive old age and survivors benefits.

"This is Socialized Medicine. This is Oscar Ewing's National Compulsory Health Insurance all over again. A decade later perhaps and for

Opinions expressed in contributions to The Journal are those of the writers and do not necessarily reflect the views of the Kentucky State Medical Association.

a limited number of people but it is "cut from the same cloth" and, I am sure, emanates from the same minds.

"It is the beginning of the end of the private practice of medicine.

"It is the death knell for the young, and growing voluntary health insurance industry.

"It is a serious threat to the well being and local autonomy of the voluntary hospital at the community level.

"It is Socialism under the auspices of the federal government.

"Gentlemen, I submit that this bill is at least nine parts evil to one part sincerity!

"For 35 years I practiced surgery, and never once did I operate without first making a full diagnosis of the case. Furthermore, none of you prescribes therapy without an adequate diagnosis. This is the way good medicine has been practiced.

"Now along comes a new concept. A solution to a problem without first ascertaining its true scope. In short, prescribing treatment without a diagnosis about (1) the economic resources of our older population, (2) the present and planned programs of voluntary insurers, (3) indigent care at the state level, (4) the incidence of hospitalization and illness by age groups, and other complex research questions.

"This procedure may be an advance in the field of vote-getting, but it would be a complete failure in medical and surgical practice.

"The physicians of America want to give only the best medical care to their patients, and I believe that government medicine through OASDI will be detrimental to our people. We have the experiences of Socialized Medicine in other countries to support this belief.

"For two decades the American people in great numbers have supported and benefited from voluntary health insurance. During that time the health insurance industry has had unprecedented growth.

"The number of persons covered in every age bracket has been rising steadily. The type of plans and the quality of coverage have been improved enormously, and, I predict, they will continue to improve.

"No one claims, of course, that the competitive voluntary health coverage system is perfect, but compared to government medicine it is far superior.

"In the field of old-age coverage the health insurance industry is beginning to make rapid and far-reaching strides. Because of the great changes in medicine and in medical care the industry has embarked upon vast experimentation with many plans, different approaches, and coverage for various groups within the old-age population. The experiments are being tailored to fit the variety of needs.

"Labor and management, too, are getting together in an attempt to provide health insurance coverage for retiring personnel.

"Many of the plans devised will not at first be perfect. I am sure, however, that as a result of the many studies in the field of old-age coverage we will come up with an answer—perhaps many answers—to the compound issue.

"I personally feel that we are on the verge of grand achievements in furthering the well-being of our older population. Medical science is leading the way, and the health insurance industry must proceed with alacrity with the best possible coverage programs on a non-cancellable basis.

"I firmly believe that dynamic competition in the health insurance industry will bring sweeping changes and new ways to improve personal security for older people without the loss of personal freedom for these persons and all their fellow citizens."

* * * * *

"Just as I am opposed to the enactment of new government health and welfare programs such as the Forand bill, so I am opposed to any extensions of certain existing programs that are now the law of the land.

"For example, when the present Medicare program became law, our Association worked with the federal government in an effort to implement the program. However, our A.M.A. Task Force made it clear that the program carried with it some danger to the private practice of medicine.

" 'Constant vigilance will be necessary,' it said, 'to prevent any significantly adverse effect on the private practice of medicine.'

"In its interim progress report to Congress the Department of Defense recommended that Medicare 'be continued as at present until studies and experience indicate that modifications are timely and appropriate.' I sincerely hope that future modifications will contain the recommendation of this House of Delegates to place the remuneration of physicians on an indemnity basis wherever states desire it.

"If we are to stand fast against those who would promote an unhealthy climate for private effort and ingenuity, we physicians must have a singleness of purpose within our own ranks. We must present a united front, ready to rally to the cause of the best possible medicine for all Americans.

"It is not enough, either, that only the older hands in the local and state medical societies take the time and exert their efforts to curb the evils of outside encroachment and control of medical practice. We need the young members of our profession as medical leaders in the socio-economic field. They can provide much of the new imagination, vigor and positive programs so urgently required to defend the sound principles of the founding fathers of our nation and of our medical association.

"We all know there is work to be done if our precious freedoms are to be preserved. Just as our profession is turning more and more to the prevention of disease, so must we apply our talents to the preservation of our nation's socio-economic health and to the prevention of political diseases that can cripple, waste away and kill our freedom.

"The work we have to do, gentlemen, is truly an emergency. It cannot be put off; it cannot be accomplished by a few hands overnight. It demands that all men of high principles work in harmony, in strength and with all good speed.

"Back in 1949-50 we moved in this manner to meet an ill-advised, but heavily supported government threat. Our efforts then made it possible for us to be a free profession undominated by government.

"Now we are called upon again to stem a new and equally serious peril.

"How effective we are in our unified efforts to deter the trend toward intervention into medicine may well determine whether we are to remain an unhampered profession dedicated to giving patients what they want most—good, individual, personalized medical care."

Dr. Allman has proposed a philsophy which many of us will find appropriate to the present issues and upon which we all may well ponder seriously.

Sam A. Overstreet, M.D.

HEAR Outstanding Nationally Known Guest Speakers

DISCUSS Vital Subjects

- Third Party Medicine
- Voluntary Health Plans
- The Washington Scene
- Operation Medicare
- PR Programs

Eighth Annual County Society Officers Conference

March 27, 1958 • 9 a.m. to 3 p.m. • Hotel Phoenix, Lexington

ORGANIZATION SECTION

Outstanding Speakers to Discuss Vital Subjects at County Society Officers Conference on March 27

Top flight speakers discussing timely subjects of vital concern to the medical profession—including medical legislation, third party medicine, and voluntary health plans—should make the 1958 County Society Officers Conference at the Phoenix Hotel in Lexington on March 27 one of the "best yet", according to Edward B. Mersch, M.D., KSMA president.

"A distinguished group of nationally known speakers will participate in a program that will be a 'must' for all county society and KSMA officers; as well as one that many KSMA members won't want to miss," he said.



Dr. Gundersen

Gunnar Gundersen, M.D., president-elect of the American Medical Association, will be featured speaker at the luncheon. His subject will be "Transfusion." A surgeon and a graduate of the Columbia University School of Medicine in 1920, he operates a clinic in Lacrosse, Wisconsin, with his three brothers who are also physicians.

"Operation Medicare" a talk covering Medicare's first 15 months of operation, will be given by Major General Paul I. Robinson, Executive Director of the Office for Dependents Medical Care, Department of the Army, Washington, D. C. The son of a physician, General Robinson graduated from Washington University School of Medicine, St. Louis, in 1928 and the Army Medical School in 1929. He is a member of the Council of the Association of Military Surgeons of the U. S., and was listed in Who's Who in America in 1956.



Maj. Gen. Robinson

"A Lawyer Looks at Third Party Medicine," will be discussed at the meeting by Arthur J. Clephane, a Philadelphia attorney, who serves as counsel for the Medical Society of the State of Pennsylvania and the Philadelphia County Medical Society. A member of the American, Pennsylvania, Philadelphia, and District of Columbia Bar Associations, Mr. Clephane serves as a member of the Medico-Legal Committee of the Pennsylvania Bar Association.

"Government Ghosts in the Doctor's Office" is the provocative subject chosen by Thomas H. Alphin, M.D., director of the Washington, D. C., office of the American Medical Association. A graduate of the University of Virginia Medical School in 1947, he will discuss legislation on a national level.



Dr. Alphin

If you're interested in learning how successful state legislative programs are mapped by medical associations, then you'll want to hear another attorney, Robert B. Throckmorton, who serves the Iowa State Medical Society, discuss that subject. He has represented that society in the recent widely published corporate practice of medicine issue. His father is a practicing physician and his brother is a surgeon.

An insight into the workings of the Blue Shield Plan will be given by John W. Castellucci, Chicago, executive director of the Blue Shield Medical Care Plans, who was originally scheduled to speak at last year's meeting. He is a graduate of Detroit College of Law. Before coming to his present post, he was assistant director of the Michigan Medical Service. While there he helped direct and organize the first professional relations department in Blue Shield and became widely known for the veterans home town medical care plan.

The executive secretary of the Kansas Medical Society, Oliver E. Ebel, will give his views on "Implementing a New Kind of Survey." Mr. Ebel, a graduate of the University of Redlands in California, attended the University of Kansas for two years. He

An Urgent Request to Co. Societies

County Society secretaries who have not yet forwarded lists of new officers and committees to the Headquarters Office, 1169 Eastern Parkway, Louisville 17, Kentucky, are urged to do so as soon as possible, according to Edward B. Mersch, M.D., Covington, KSMA president.

He stressed the importance of getting the names in promptly, so that the Headquarters Office may send the new officers and committeemen invitations to the County Society Officers Conference in Lexington on March 27.

PROGRAM

EIGHTH ANNUAL COUNTY SOCIETY OFFICERS CONFERENCE

Phoenix Hotel, Lexington — **Thursday, March 27, 1958**

MORNING SESSION

Fireside Room

Edward B. Mersch, M.D., Covington, President
Kentucky State Medical Association, presiding

9:00 a.m. **Registration and Coffee**

9:45 a.m. **Call to Order and Announcements,** Dr. Mersch
Invocation, Dr. James W. Angell, Pastor, Second Presbyterian Church, Lexington
Welcome, Robert B. Warfield, M.D., President Fayette County Medical Society

9:55 a.m. **Remarks from the Secretary,** Woodford B. Troutman, M.D.

10:00 a.m. **"Mapping a Successful State Legislative Program,"** Robert B. Throckmorton, Des Moines, attorney for the Iowa State Medical Society

10:20 a.m. **"Operation Medicare,"** Major General Paul I. Robinson

10:40 a.m. **"Implementing a New Type of Survey,"** Oliver Ebel, Topeka, Kansas, Executive Secretary, Kansas State Medical Society

11:05 a.m. Coffee Break

11:15 a.m. **"Government Ghosts in the Doctor's Office,"** Thomas H. Alphin, M.D., Director of the Washington, D. C., Office of the American Medical Association

11:40 a.m. **Panel: "What's Your Question, Doctor?",** Clyde C. Sparks, M.D., Speaker, KSMA House of Delegates, Moderator

LUNCHEON SESSION

Private Dining Room Number Three

Edward B. Mersch, M.D., Presiding

12:30 a.m. **"Transfusion,"** Gunnar Gundersen, M.D., LaCrosse, Wisconsin, President-Elect of the American Medical Association

AFTERNOON SESSION

Private Dining Room Number Three
Robert W. Robertson, M.D., Paducah, President-Elect,
Kentucky State Medical Association, presiding

2:00 p.m. **"Blue Shield and Tomorrow,"** John Castellucci, Chicago, Illinois, Executive Director of the Blue Shield Medical Care Plans

2:25 p.m. **"Third Party Medicine in Pennsylvania,"** Arthur J. Clephane, Philadelphia, Pennsylvania, attorney for the Pennsylvania State Medical Society and the Philadelphia County Medical Society

2:50 p.m. **Discussion Period**

3:00 p.m. **Adjournment**



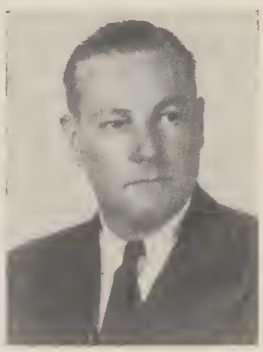
Mr. Throckmorton



Mr. Ebel



Mr. Castellucci



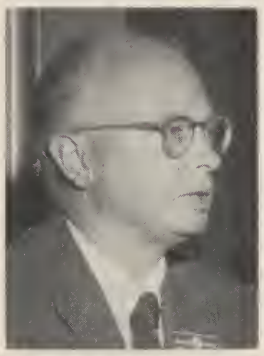
Mr. Clephane

has been secretary of the Kansas Society since 1944. The Kansas State Medical Society has been responsible for a number of "firsts" in medical organization work. His talk should be most enlightening.

Further details on the conference will be featured in the March issue of the Journal.

Dr. Austin Smith Banquet Speaker at KAGP Session in April

Austin Smith, M.D., will be the banquet speaker at the Seventh Annual Session of the Kentucky Academy of General Practice at the Brown Hotel in Louisville on April 23, 24, and 25.



Dr. Smith

Prominent speakers from throughout the U. S. will be included on the program according to Ed Morgan, M.D., Louisville, who is in charge of the program. There will be no registration fee for the assembly, and the full program will appear in the next Journal.

"The Future for the General Practitioner" is the subject of the talk which Doctor Smith will give at the annual banquet on Thursday night, April 24. He is editor and managing publisher of the Journal of the AMA and editor-in-chief and managing publisher of the scientific publications of the AMA.

Symposium on Heart Disease in Louisville, March 7-8

Sixteen speakers will headline the program of the Fourth Annual Symposium on Cardiovascular Disease on the Roof Garden of the Brown Hotel in Louisville on March 7-8, according to John S. Llewellyn, M.D., Louisville, Symposium chairman.

A dinner on Friday night, March 7, will be a highlight of the Symposium. J. Murray Kinsman, M. D., Dean of the University of Louisville School of Medicine, will preside at the dinner which will have as guest speaker William Dock, M.D., professor of medicine at the State University of New York Downstate Medical Center, who will talk on "Control of Atherosclerosis."

Other guest speakers at the meeting, which 300 physicians are expected to attend, will be: William A. Brodsky, M.D., Research Professor of Physiology, University of Louisville School of Medicine; G. E. Burch, M.D., Henderson Professor and Chairman of the Department of Medicine, Tulane University School of Medicine, New Orleans, Louisiana; Edward D. Freis, M. D., Chief, Medical Service, VA Hospital, Washington, D. C.; W. Proctor Harvey, M.D., Director of Heart Station, Georgetown University Medical Center, Washington, D. C.; Douglas M. Haynes, M.D., professor and chairman, department of obstetrics and gynecology, University of Louisville; Ormond C. Julian, M.D., Associate Professor of Surgery, University of Illinois School of Medicine, Chicago; John S. LaDue, M.D., Associate Professor of Medicine, Cornell University Medical College, New York, N. Y.; Hampden C. Lawson, M.D., professor and chairman, department of Physiology, University of Louisville School of Medicine.

E. Hugh Luckey, M.D., professor of medicine, chairman of department, Cornell University Medical School, New York, N. Y.; James Metcalfe, M.D., Harvard University and Boston Lying-In Hospital, Boston, Mass.; F. Mason Sones, Jr., M.D., chairman of the department of cardiovascular diseases, Cleveland Clinic, Cleveland, Ohio; G. E. Wakerlin, M.D., professor and head of the department of physiology, University of Illinois School of Medicine, Chicago, Illinois; Beverly Todd Towery, M.D., professor and chairman, department of medicine, University of Louisville School of Medicine.

Members of the committee are: George W. Pedigo, Jr., M.D.; Jack Chumley, M.D., Walter S. Coe, M.D., W. Burford Davis, M.D., C. Howe Eller, M.D., Hugh B. Lynn, M.D., and Ralph M. Denham, M.D.

Additional information on the symposium is on page 194.

Plan Post Grad. Seminar on April 3 in Harrodsburg

The Third Annual Regional Post Graduate Seminar in Harrodsburg, sponsored jointly by the KSMA Committee on Post Graduate Education, the University of Louisville School of Medicine, and the Kentucky Academy of General Practice, will be held at the Beaumont Inn on Thursday, April 3.

Special invitations to the seminar will be issued to physicians in 30 counties reaching to the Tennessee border, according to Walter Coe, M.D., Louisville, Committee chairman who said all KSMA members are welcome.

Following is the seminar program:

2:00 p.m.	"Emergenices of the Newborn," Joseph A. Little, M.D., Associate Professor of Pediatrics and Physician in Chief, Children's Hospital, Louisville
3:00 p.m.	"Indications and Contra-Indications for Caesarean Section," Douglas M. Haynes, M.D., Professor and Chairman department of Obstetrics and Gynecology, University of Louisville, School of Medicine
4:00 p.m.	"Emergency Treatment of Burns," William T. Rumage, M.D., Instructor in Surgery, University of Louisville
5:30 p.m.	Social Hour
6:30 p.m.	Dinner
7:30 p.m.	"Peptic Ulcer," Malcolm Stanley, M.D., professor of experimental Medicine, University of Louisville School of Medicine
8:00 p.m.	Adjournment

Ky. Chapter ACS Plans Meeting in Louisville, May 16-17

The Kentucky Chapter of the American College of Surgeons will hold its annual meeting at the Brown Hotel in Louisville on May 16 and 17, according to J. Vernon Pace, M.D., KAGP president, Paducah.

Coleman Johnston, M.D., Lexington, has been named chairman of the program committee and Robertson Joplin, M.D., Louisville, is in charge of

arrangements.

Doctor Pace said that the report of the program committee would be available for publication in the April issue of the Journal.

Dr. Pirkey to Help U of L Plan "Med. School of Future"

Everett L. Pirkey, M.D., has been named to help plan "a medical school of the future" at the University of Louisville, according to an announcement from the University's Board of Trustees.



Dr. Pirkey

He will be on leave from his duties as head of the department of radiology at the U of L Medical School from January 1 to July 1 and will work with J. Murray Kinsman, M.D., the school's Dean, and Dr. Philip Davidson, U of L president, on the development of long-range plans for the medical school.

The study will include modernizing the curriculum and teaching methods and developing building plans. Under consideration will be the possibility of shortening the length of time spent in training before a person is ready to practice medicine.

Specialty Group Presidents Meet on January 9

The part the specialty groups play in the success of the KSMA Annual Meeting was stressed by President Edward B. Mersch, M.D., Covington, at a meeting of the specialty group presidents in Louisville on January 9.

Specialty group presidents expressed the view that the coming annual meeting should be very worthwhile, and discussed plans for obtaining outstanding annual meeting speakers for the 1958 session.

Representatives of specialty groups attending the meeting were: James R. Flautt, M.D., Louisville, Kentucky Society of Anesthesiologists; J. Ray Bryant, M.D., Louisville, Kentucky Chapter, American College of Chest Physicians; Buerk Zimmerman, M.D., Louisville, Kentucky Eye, Ear, Nose and Throat Society; Charles G. Bryant, M.D., Louisville, Kentucky Chapter, American Academy of General Practice; Douglas Haynes, M.D., Louisville, Kentucky Obstetrical and Gynecologic Society.

K. Armand Fischer, M.D., Louisville, Kentucky Orthopedic Society; Harry S. Andrews, M.D., Louisville, Kentucky Chapter, American Academy of Pediatrics; Sam A. Overstreet, M.D., Kentucky Chapter, American College of Physicians; Frank Gaines, Jr., M.D., Kentucky Psychiatric Association; Harry K. Dillard, M.D., Lexington, Kentucky Public Health Physicians; and David Shapiro, M.D., Kentucky Radiological Society. J. Vernon Pace, M.D., Paducah, president of the Kentucky Chapter, American College of Surgeons, was unable to attend the meeting.

STUDENT AMA

During the past two years a new and rapidly growing organization has been developing. This is the SAMA Auxiliary. There are a number of reasons why this group should flourish, as it apparently has.

It is well known that more medical students are married now than in times past. A recent survey which appeared in the December, 1957 issue of "The New Physician" pointed out that in three schools, 76 per cent of the senior class is married. Thus there is a relatively new and important group associated with the medical schools.

In a large number of medical schools, there is a need for an organization to which all students' wives can belong. Many medical schools have a number of smaller wives' organizations which do not provide a common forum for this influential group.

The SAMA Auxiliary was established for the purpose of educating the students' wives about medicine in general, and about the role of the medical student. Because of the gender of its members, I suspect that other, more sociable functions will be incorporated.

The rules of the organization state that only the wives of medical students at a given university may have the privilege of voting. However, girl friends and other female associates of medical students are invited to attend the meetings and to express their ideas freely. This year, for the first time, the SAMA Auxiliary will have a national meeting of its own during the general SAMA convention in Chicago.

A number of changes in the usual program have been incorporated into the program for the 1958 Student AMA Convention. An extra day has been added to the schedule, allowing two entire days for scientific lectures and discussions. A number of important persons in medicine have been invited to address these meetings. This is entirely new, since in the past the regular sessions were devoted almost entirely to discussion of matters of policy at the national and chapter level.

The amount of time given to the House of Delegates for regular business sessions has been somewhat reduced. The national organization hopes that this change in the content of the meetings will encourage more students to attend and will satisfy deans and other persons in charge of school affairs of the academic importance of the convention. A group from Louisville will attend these meetings, but there has been some consternation since SAMA Convention time coincides with Kentucky Derby time.

Clarke Anderson, President
U of L Chapter, Student AMA

Dr. Chambers Heads Foundation

John S. Chambers, M.D., former head of the University of Kentucky Health Service, was elected president of the Kentucky Medical Foundation at a meeting in Lexington on December 21. Doctor Chambers retired in the fall of 1956 after 29 years as head of the UK unit. Kentucky physicians who were re-elected to office include: Daniel C. Elkin, Lancaster; Francis M. Massie, Lexington; and Sam A. Overstreet, Louisville, vice presidents.

Locate Your Congressman Here



The above map shows the boundaries of the various congressional districts

Kentucky's U.S. Congressmen Listed

For the convenience of KSMA members who want to contact their U. S. Senator and Congressmen, the Journal is printing a map of congressional districts and the names of Kentucky's U. S. Senators and Representatives.

When writing to them in Washington the addresses to use are "House Office Building" or "Senate Office Building."

U. S. SENATORS

Name	City
John Sherman Cooper (R)	Somerset
Thruston B. Morton (R)	Glenview

U. S. REPRESENTATIVES

District	Name	City
1	Noble J. Gregory (D)	Mayfield
2	William H. Natcher (D)	Bowling Green
3	John M. Robsion, Jr. (R)	Louisville
4	Frank L. Chelf (D)	Lebanon
5	Brent Spence (D)	Fort Thomas
6	John C. Watts (D)	Nicholasville
7	Carl D. Perkins (D)	Hindman
8	Eugene E. Siler (R)	Williamsburg

PG Pediatric Course at Children's April 15—June 3

A Post graduate course in Pediatrics, sponsored by the University of Louisville School of Medicine's Department of Pediatrics with the cooperation of the KSMA and the Kentucky Chapter, American Academy of Pediatrics, will be held at Children's Hospital in Louisville April 15—June 3.

The KSMA Committee on Postgraduate Education has announced that the sessions will be held on Tuesdays from 9:30 a.m. to 12:30 during the eight-week period. Registration fee for the complete course is $30 or $5 for each individual session.

Full program of the course which is under the direction of Alex J. Steigman, M.D., chairman of the department of pediatrics at the U of L, will appear in the March issue of the Journal.

Dr. Sparks to Replace Dr. Bailey on AMA Committee

Clyde Sparks, M.D., Ashland, Speaker of the KSMA House of Delegates and former KSMA president, has been named by the Council on Medical Service to replace the late Clark Bailey, M.D., on the AMA's Committee on Medical Care for Industrial Workers.



Dr. Sparks

"Doctor Sparks' years of service to many medical groups and experience in industrial medicine made him a logical choice for the post at which Doctor Bailey served so well," Edward B. Mersch, M.D., KSMA president, said.

He is a Fellow of the American College of Surgeons and of the Kentucky Surgical Society and a charter member and past president of the Kentucky Society for Obstetrics and Gynecology. Doctor Sparks has also held various offices in the Boyd County Medical Society.

Ky. Surgical Society Plans Meet with Va. Group in April

The Kentucky Surgical Society is planning to hold a joint meeting with The Virginia Surgical Society at The Greenbrier, White Sulphur Springs, West Virginia on April 11-12.

Announcement of the meeting was made by C. Melvin Bernhard, M.D., Louisville, society secretary. The April date is a month earlier than the usual May annual meeting date of the society, he said.

Look for more details and a full program of the meeting in the March issue of the Journal.



This is an architect's sketch of the new Blue Cross - Blue Shield home office building which will be located facing the Watterson Expressway north of the Bardstown Road interchange in Louisville. It was designed by Fred Elswick and Associates to assure maximum efficiency and minimum cost of operation, and provide for future growth.

New Blue Cross-Shield Building Under Construction

Construction of a new Kentucky Blue Cross-Blue Shield home office building in Louisville, to replace their present crowded facilities, was scheduled to begin earlier this month, according to J. Duffy Hancock, M.D., president of the Kentucky Physicians Mutual, which in the Blue Shield plan for Kentucky.

The new building, which will have 41,000 feet of floor space and is expected to cost $567,213 has been designed as a one-story basic building with a two-story colonial brick front. It will be located in Louisville at the northeast corner of the Watterson Expressway and Bardstown Road. The building is expected to be ready for occupancy in 1959.

According to Doctor Hancock, the new building will permit Blue Cross-Blue Shield to continue their low operating costs and to increase efficiency. The move was necessitated by the remarkable growth of the Kentucky Blue Cross-Blue Shield Plans since moving into their present location at 231 West Main Street in 1950. The entire building project can be paid for in less than 10 years by funds which would have to be used for leasing at present rental cost, Doctor Hancock said.

Contracts for construction have been let to Wehr Constructors, Inc., Stewart Distributing Co., Ward Engineering Co., Inc., and Henderson Electric Co.

DD Form 1173 Now in Effect for Medicare Patients

"The Uniformed Services Identification and Privilege Card" (DD Form 1173), which went into effect on January 1, is the only one acceptable for establishing the eligibility of dependents for care under the Medicare program, except in certain emergency conditions and, in some cases for children under 10, according to the Office for Dependents' Medical Care, Department of the Army.

Because of these two major exceptions, and the transitory nature and continual turnover of service personnel, cases will arise wherein the eligible dependent may not have a DD Form 1173 for identification purposes.

In such cases, the physician or hospital must exercise reasonable care in determining the eligibility of Medicare Patients and require some form of identification. Eligibility of children under 10 who do not carry a Form DD 1173 may be established by the accompanying parent or guardian.

When submitting claims, the dependent or sponsor will be required to show on the claim form the type of identification used, and if it is not based on DD Form 1173, the reason why it was not available should be stated on the claim form or attached to it.

Only the lawful wife, dependent husband, and legitimate children of Uniformed Service members on active duty are authorized medical care from civilian sources under the Medicare Program, even though DD Forms 1173 are being issued to all dependents who require identification for other purposes within the Uniformed Service. In certain instances, a form may erroneously reflect that a person (parent, or parent-in-law) is entitled to medical care in civilian sources. When this occurs, contractors should request all concerned to notify the Office for Dependents' Medical Care accordingly.

AMA Realignment Changes Duties of Drs. Lull and Blasingame

In a realignment of duties at the American Medical Association which went into effect on January 1, George F. Lull, M.D., was named assistant to the president and F. J. L. Blasingame, M.D., Wharton, Texas, assumed responsibility for over-all administration with the title of general manager.

Doctor Blasingame has been a member of the AMA Board of Trustees and in 1955 he served as president of the Texas State Medical Association.

Doctor Lull, in addition to serving as secretary of the Association, will relieve the president of many of the burdens of his office and will act as a special ambassador of the medical profession throughout the country. He joined the AMA staff in 1946, after serving 34 years in the army.

Contract Let for UK Med Center

A contract for construction of the first unit of the Albert B. Chandler Medical Center at the University of Kentucky was signed December 19 with the Foster and Creighton Company of Nashville, Tennessee, which submitted a low bid of $5,184,700 for construction of the medical sciences building.

Work on the first unit was scheduled to begin early in January, with the target date for completion set for September 15, 1959. Based on present estimates, the federal government has approved $8,630,000 in Hill-Burton Funds toward costs of the medical school and hospital.

DIGEST OF THE DECEMBER 12, 1957 MEETING OF THE COUNCIL*

At a meeting of the Council in Louisville on December 12, 1957, President Edward B. Mersch, M.D., Covington, reported that the Committee on Scientific Assembly and Arrangements was well along in its preparations for the 1958 Annual Meeting. He announced that there would be color television, and the Council accepted his recommendations that award winners be presented at the President's Luncheon and that inaugural ceremonies take place on Wednesday night at the House of Delegates meeting.

At the request of the President, the Council voted to thank the Ames Company for its invaluable assistance in the 1957 Diabetes Detection Drive.

The KSMA delegation to the AMA clinical meeting in Philadelphia reported that the most hotly debated issue at that meeting was fluoridation of water. Other highly important matters acted on were the Forand Bill, UMWA problems, and Medicare. W. Vinson Pierce, M.D., Covington, senior delegate to the AMA from Kentucky, said that the AMA House of Delegates stood in recognition of the passing of Clark Bailey, M.D., who had represented KSMA in that body for many years. He said there were many expressions of sympathy and concern over Doctor Bailey's death.

The presidential address of David B. Allman, M.D., AMA president, which urged that medicine mobilize its strength in an effort to defeat the Forand Bill, was highly complimented.

Doctor Pierce told the Council that Clyde C. Sparks, M.D., former KSMA president, had been named by the Council on Medical Service to take Doctor Bailey's place on the AMA Committee on Medical Care for Industrial Workers.

Both delegates emphasized the need for a larger representation from Kentucky to cover the various activities of the House, and especially urged that the President and President-Elect attend the meeting of the AMA House of Delegates each year.

The Headquarters Office report stated that as of December 1, 1957, 2062 members had paid their KSMA dues, and 1716 had paid their AMA dues. It stated that the Diabetes Detection Drive had apparently been a success, that plans for the County Society Officers Conference in Lexington on March 27 were nearing completion; and that the Senior Day Committee was to meet to draft plans for the April, 1958, annual Senior Day program.

It also noted that the Headquarters office had been active in promoting district councilor meetings and working with the various committees and agencies of the Association.

Robert C. Long, M.D., Louisville, chairman of the Special Medicare Committee, gave a lengthy and detailed report of his findings at the recent Philadelphia meeting of the AMA and the special meeting on Medicare which was held on December 6 following the close of the AMA sessions. Doctor Long pointed out that the KSMA House of Delegates had authorized his committee to negotiate a new contract with the Defense Department on an indemnity basis and that it had called for a special meeting of the House three months before the new contract was to be signed.

Following Doctor Long's report, comments from Doctor Pierce, and questioning by the Council it was agreed that it would not be possible under the present law to negotiate the type of contract that was desired. It was pointed out, that if no contract were negotiated at all, the members of the Association would have no voice in the operation of the program in Kentucky. After further discussion the Council voted to hold in abeyance the two directives of the House of Delegates at the 1957 session in connection with the Medicare contract.

F. P. Zuspan, M.D., an employee of the Miners Hospital at McDowell, Kentucky, was introduced to the Council. Doctor Zuspan had requested a hearing before the Council because his application for membership in the Floyd County Medical Society had not been acted upon favorably.

Doctor Zuspan read a 25-minute statement, which was followed by a question and answer period, and then left the meeting. The Council discussed the matter at some length and then referred Doctor Zuspan's 16-page appeal to the Association's attorney, Mr. E. Gaines Davis, for careful study and report at the next meeting of the Council.

Some of the legislative proposals which would be offered by the Health Department at the 1958 session of the Legislature, were reviewed by the Health Commissioner, Russell E. Teague, M.D.

The Council voted to hold the 1960 Annual Meeting on September 20, 21, and 22 at the Columbia Auditorium in Louisville.

The term of William H. Fuller, M.D., Mayfield, on the State Board of Health expires on December 31, 1957. As provided by law the Council nominated three physicians: William H. Fuller, M.D., Mayfifield; O. Leon Higdon, M.D., Paducah; and Wilbur R. Houston, M.D., Erlanger. The names are submitted to the Governor for his consideration in naming an appointee to fill the vacancy.

The House of Delegates mandate relative to the Corporate Practice of Medicine was considered by the Council and after discussion it voted to consider itself as a committee to implement the mandate.

Gaithel L. Simpson, M.D., Greenville, gave the Council a summary of the latest developments and recommendations of the Governor's Commission on Indigent Medical Care. Using a large chart, Doctor Simpson outlined the proposals of the new law and pointed out that every member of the Association had received a copy of a Summary Report from the Health Department. Following Doctor Simpson's presentation, the Council went on record as approving the principles of the program as presented by Doctor Simpson. It also voted to express its appreciation to Doctor Simpson and other KSMA representatives on the Commission.

Thomas Leonard, M.D., Frankfort, chairman of the KSMA Legislative Committee, reported on the developments of the November 14, 1957 meeting. In-

**As authorized by the 1956 session of the House of Delegates, the Journal is presenting a digest of the minutes of the December 12 meeting of the Council of the KSMA.*

cluded in this report were the following subjects: the advantages of having a model autopsy law in Kentucky, the need for a law controlling quick cremations, and legislative proposals covering the licensing of physical therapists in this state. Doctor Leonard also discussed the future of legislative proposals of the Governor's Commission on Indigent Medical Care.

Doctor Leonard asked the Council to appoint someone to fill the vacancy on the Legislative Committee caused by Doctor Bailey's death. The Council asked Keith P. Smith, M.D., Councilor from the Fifteenth District to investigate this matter.

It was reported that correspondence was received by many Kentucky physicians from the Department of Economic Security, relative to a fee schedule. It was "the general opinion of the Council that no set fee should be stated and that the physician in question should reply that he based his charges on the work done or fee-for service basis."

The Council appointed Sam A. Overstreet, M.D., chairman of the KSMA's Committee on Professional Relations to fill a vacancy created by the death of Dr. Bailey.

George Archer, M.D., Prestonsburg, was elected alternate delegate to the AMA to serve with Robert C. Long, M.D., who filled the vacancy created by the death of Dr. Bailey.

The Executive Secretary was authorized to use his best judgment in the purchase of adequate addressograph equipment for the Association.

92 Kentuckians Attend SMA Meet in Miami, Nov. 11-14

The *Daily Bulletin* of the Southern Medical Association shows that 92 physicians from Kentucky attended the Association's 51st Annual Meeting in Miami, Florida on November 11-14.

J. Duffy Hancock, M.D., Louisville, was elected to the SMA Council from Kentucky, to replace A. Clayton McCarty, M.D. Louisville, chairman of the Council, who had completed his five year term. Four Kentuckians were named as associate councilors. They are: G. Y. Graves, M.D., Bowling Green; Charles Rutledge, M.D., Hazard; Sam Overstreet, M.D., and Carroll Witten, M.D., Louisville.

Several procedural changes were passed at the meeting, including decisions that hereafter the election of councilors will be by state and that nominations for elective offices (like president, vice president, etc.) will be by the nominating committee. Other highlights were covered in the January issue of the Journal.

Kentucky contributed a greater number of new members to the SMA this year than any other southern state, according to Doctor McCarty.

The following Kentucky physicians attended the meeting:

AUBURN—C. A. Wood; BOWLING GREEN—G. Y. Graves; CAMPBELLSVILLE—M. M. Hall; COVINGTON—Clifford N. Heisel, George H. Siehl; ELKTON—Ralph D. Lynn; EMINENCE—G. E. Munn; FRANKFORT—L. L. Cull; FLEMING—Ernest G. Skaggs; FLORENCE—Gladys L. Rouse; FULTON—David L. Jones; FORT MITCHELL—J. A. Ryan; FORT THOMAS—George Hermann; GRAYSON—R. G. Townsend; HARRODSBURG—T. O. Meredith; HARTFORD—Paul E. Goode; HAZARD—E. S. Carter, Jr., Charles C. Rutledge; HIGHLAND HEIGHTS — Donald M. Stevens; HOPKINSVILLE—D. M. Clardy, Harvey B. Stone.

LEXINGTON—Rufus C. Alley, Claude M. Bays, Allen E. Grimes, G. M. Gumbert, Jr., William H. Hyden, Irving F. Kanner, H. Halbert Leet, William K. Massie, Lloyd D. Mayer, T. O. Meredith, T. J. Overstreet, William H. Pennington, K. R. Thompson, Carl M. Triesen; LONDON—Thomas H. Biggs; LUDLOW—Charles W. Justice.

LOUISVILLE—George S. Allen, S. P. Auerbach, Malcolm Barnes, Oren A. Beatty, Melvin C. Bernhard, Thomas J. Crice, M. R. Cronen, R. E. Doughty, Louis M. Foltz, Luther J. Fuller, Isadore Goldstein, J. D. Gordinier, O. J. Hayes, W. O. Johnson, Jesshill Love, Marvin A. Lucas, Lanier Lukins, R. F. Monroe, William Ray Moore, Carlisle Morse, Oscar O. Miller, A. Clayton McCarty, C. David McClure, W. W. Nicholson, Sam A. Overstreet, A. J. Pauli, Harry Pfingst, Frank Pirkey, Ben A. Reid, Ephraim Roseman, Irvin S. Rosenbaum, George O. Roth, W. F. Rubel, Fred W. Rulander, John Ryan, E. P. Scott, Frank A. Simon, Edwin P. Solomon, George C. Stege, Karl D. Winter, Carroll L. Witten, Raleigh E. Witten, Allan F. Zoeller.

LYNCH—Leland E. Payton; MAYSVILLE—C. G. Prindle; OWENSBORO — Horace Harrison; PADUCAH—Charles B. Billington, M. W. Fowler; PARIS—Marvin B. Dillon; RICHMOND—John B. Floyd, Sr.; SHELBYVILLE—A. D. Doak, M. D. Klein; SOMERSET—McLeod Patterson, Richard H. Weddle; WINCHESTER—G. H. Clark.

SKF Grants to Two at U of L

Two members of the University of Louisville School of Medicine faculty were listed as fund recipients in a report of the Smith, Kline and French Foundation showing total disbursements of $1,457,876 from 1953 through 1956.

Beverly T. Towery, M.D., head of the research department, was given an unrestricted grant of $8000 in 1956 for development of departmental research activities. Frank Falkner, M.D., assistant professor of child health, received a $6,400 grant in 1956 to aid in the establishment of an institute of child growth. Purpose of the institute will be to study the development of the child through maturity.

Eight Become Members of KSMA

Eight new members have been added to the roster of the KSMA since the last listing in the Journal. They are:

Ronald F. Broach, M.D., Waverly Hills
John Burris, M.D., Morgantown
Gardner R. Harrod, M.D., Waverly Hills
Benjamin B. Jackson, M.D., Louisville
John R. Levitas, M.D., Louisville
William J. McNabb, M.D., Louisa
Victor E. Scherer, M.D., Scottsville
Richard H. Segnitz, M.D., Lexington

Harlan Co. Starts Scholarship Fund in Dr. Bailey's Memory

A scholarship loan fund in memory of Clark Bailey, M.D., has been set up by the Harlan County Medical Society to aid needy medical students from the county.

Edward B. Mersch, M.D., Covington, KSMA president, complimented the Society on its plan for a fund to honor Doctor Bailey. He said that he felt it was very appropriate in view of Doctor Bailey's long years of outstanding service to his patients and profession. Some of the more important offices he had held were KSMA president, AMA vice president, and delegate to the AMA.

Tentative goal of the fund is $10,000, according to Philip J. Begley, M.D., Society president, who announced that statewide contributions would be accepted. Members of the scholarship loan committee are: James D. Foley, M.D.; David Greely, M.D.; and Alberta Rigau, M.D.

Joint Commission Lists Standards for Hospital Pharmacy

A recent Bulletin of the Joint Commission on Accreditation of Hospitals carried the following information on its standards of accreditation for the pharmacy or drug room of a hospital and the role of the hospital pharmacy and therapeutics committee.

The rules covering accreditation for the dietary department, and the emergency room also contained in the Bulletin will be published in the March issue of the Journal. The standards are set up in keeping with the Commission's aim of assisting hospitals to meet and exceed minimal standards of high quality patient care.

The Commission states that there shall be a pharmacy directed by a registered pharmacy or a drug room under competent supervision, providing facilities for the storage, safeguarding, preparation, and dispensing of drugs. Personnel competent in their respective duties shall be provided in keeping with the size and activity of the department, and records shall be kept of all pharmacy transactions and correlated with other hospital records where indicated. Any special records shall be kept as required by law.

It also states that drugs dispensed shall meet the standards established by the U. S. Pharmacopeia, National Formulary, New and Non-Official Remedies, British Pharmacopeia, or Canadian Formulary and that there will be an automatic stop order on dangerous drugs.

Hospitals which cannot obtain or afford a hospital pharmacist should try to obtain the services of a hospital pharmacist on a part time or consultive basis. If a hospital pharmacist is not available, the services of a local pharmacist should be utilized where possible.

The requirement of an automatic stop-order on dangerous drugs, is frequently misunderstood by hospitals and physicians. "The Joint Commission on Accreditation of Hospitals has no right to tell physicians what kind and how much medicine they should give their patients and does not do so. The commission does desire that drugs, especially dangerous drugs (usually narcotics, sedatives, anticoagulants, and antibiotics) be given properly with medical staff control." The Commission is asking that hospital medical staffs establish a written policy that all dangerous medications, not specifically prescribed as to time and number of doses, be automatically stopped after a reasonable time limit set by the staff. This is intended as a protection against indiscriminate, indefinite prescribing of an open end type which can result in harm to the patient, physician or hospital. It especially includes such orders as p. r. n., 'as necessary,' etc.

Pharmacy and Therapeutics Committee

The Hospital Pharmacy and Therapeutics Committee, composed of physicians and pharmacists, serves as a liaison between the medical staff and the Pharmacy Department. Aimed at maintaining medical staff self government, the committee is responsible to and its recommendations are subject to the approval of the medical staff.

Its purposes are: to serve as an advisory group to the medical staff and the hospital pharmacist on matters pertaining to the choice of drugs, to add to and delete from the list of drugs accepted for use, to prevent unnecessary duplication in the stock of the same basic drug and its preparation, to make recommendations concerning drugs to be stocked on the nursing unit floors and by other services, to evaluate clinical data on new drugs or preparations requested for use, to develop a formulary or drug list of accepted drugs for use in hospital.

According to the Bulletin, "a strong Pharmacy and Therapeutics Committee, meeting at least twice yearly, though not a requirement of the Joint Commission, is considered a very important educational and advisory tool towards the improvement of patient care in hospitals and is highly recommended."

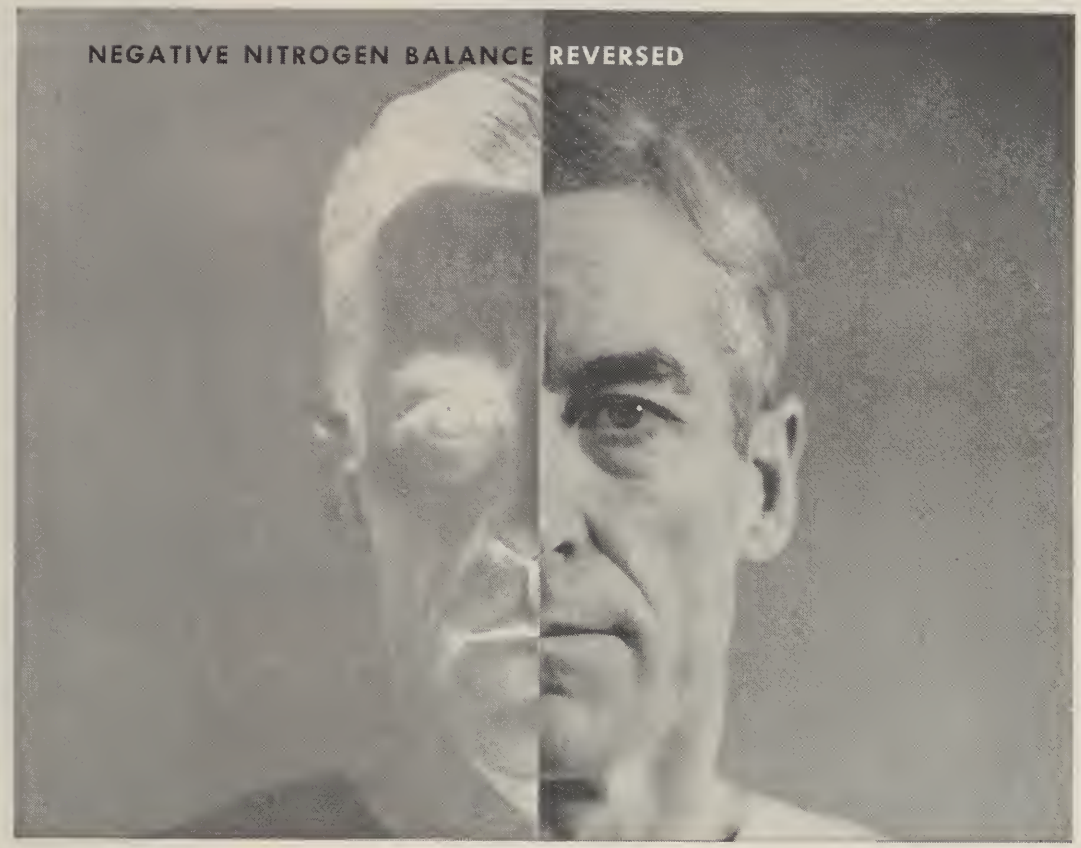
Exec. Sec. of KSARN Resigns

Cynthia N. Warren, executive secretary of the Kentucky State Association of Registered Nurses for nine years, has resigned effective March 31 and will move to Richmond, Va., where her husband has been transferred to the Quartermaster General Depot. She is presently vice chairman and charter member of the Kentucky Rural Health Council and has been secretary of the Allied Medical Council since its formation. She is a native of Whitesville and a graduate of Owensboro-Daviess County Hospital, which she later served as a floor supervisor.

Anesthesiologists Elect Officers

Robert J. Flautt, Jr., M.D., Louisville, was installed as president of the Kentucy Society of Anesthesiologists at the group's annual meeting in Louisville on January 12.

Lewis Francis, M.D., Lexington, was elected president-elect. Other officers were: German P. Dillon, Jr., M.D., vice president; Marvin A. Bowers, secretary-treasurer; Robert W. Lykins, delegate to the society's national convention and Robert P. Bergner, M.D., alternate delegate. Featured speaker at the meeting was Robert Patrick, M.D., an anesthesiologist from the Mayo Clinic, Rochester, Minnesota.



Nilevar®

stimulates protein synthesis,
corrects negative nitrogen balance

Increased nitrogen loss, with resulting negative nitrogen balance, occurs in infection, trauma, major surgery, extensive burns, certain endocrine disorders and starvation and emaciation syndromes. The intrinsic control of protein metabolism is lost and a protein "catabolic state" occurs. A patient requiring more than ten days of bedrest usually has had sufficient metabolic insult[1] to precipitate such a "catabolic" phase.

Nilevar (brand of norethandrolone) has been used in patients with varied conditions including hyperthyroidism, poliomyelitis, aplastic anemia, glomerulonephritis, anorexia nervosa and postoperative protein depletion. The patients gained weight and felt better. It was concluded[2] that "the drug certainly caused a reversal of rather recalcitrant or progressive catabolic patterns of disease."

Nilevar is unique among anabolic steroids in that androgenic side action is minimal or absent.

The suggested adult dosage is three to five tablets (30 to 50 mg.) daily. For children 1.5 mg. per kilogram of weight is recommended.

G. D. Searle & Co., Chicago 80, Illinois.
Research in the Service of Medicine.

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1. Axelrod, A. E.; Beaton, J. R.; Cannon, P. R., and others: Symposium on Protein Metabolism, New York, The National Vitamin Foundation, Incorporated, (March) 1954, p. 100.

2. Proceedings of a Conference on the Clinical Use of Anabolic Agents, Chicago, Illinois, G. D. Searle & Co., April 9, 1956, pp. 32-35.

SEARLE

Application

FOR SPACE IN THE SCIENTIFIC EXHIBIT

1958 Annual Meeting — Kentucky State Medical Association

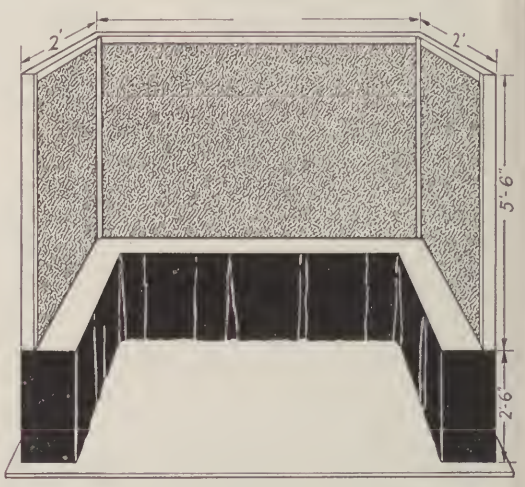
Columbia Auditorium — **Louisville, Kentucky** — **September 23, 24, 25**

Fill Out and Mail to:

EVERETT L. PIRKEY, M.D., Chairman
Committee on Scientific Exhibits
Louisville General Hospital,
Louisville 2, Kentucky

Applications for space should be received before July 1, 1958

Dimensions and structure of K.S.M.A. Scientific booth are shown in accompanying illustration



1. Title of Exhibit: .....

2. Description or nature of exhibit: (Attach brief description to this blank).

3. Will you require shelf space? .....

4. Give approximate amount of wall space needed. (Included in total space is two side walls of two feet in length) .....

5. Name of institution co-operating in the exhibit (if desired) .....

6. Name of exhibitor: .....

..... (Street & No.) ..... (City)

The Kentucky State Medical Association will provide without cost to the exhibitor the following: Exhibit space, shelves, sign for booth, current, bracket lights, provided all items are approved in advance by the committee.

Cost of transporting exhibits to the meeting must be borne by the individual exhibitor as well as costs of cards, signs, etc., which are a part of the exhibit.

View boxes, furniture, decorations, etc., may be rented, if desired, by applying directly to Jos. T. Griffin Company, 704 West Main Street, Louisville 2, who supply equipment for the annual K.S.M.A. meeting.

in common mixed infections
...tetracycline phosphate alone

PANMYCIN* Phosphate

for children:

PANMYCIN KM TRADEMARK Syrup

BROAD-SPECTRUM TETRACYCLINE IN ITS MOST EFFICIENT FORM

Produces more tetracycline in the blood with no more in the dose. No calcium to depress blood levels.[1] Basic broad-spectrum therapy in bronchitis, pharyngitis, otitis media, tonsillitis, and other common respiratory infections.

1. Welch, H.; Wright, W. W.; and Staffa, A. W.: Antibiotic Med. & Clin. Therapy 4:620, 1957.

in potentially serious infections
...tetracycline phosphate plus novobiocin

PANALBA*

for children:

PANALBA KM TRADEMARK Granules

THE BREADTH OF PANMYCIN PHOSPHATE PLUS THE ANTIMICROCOCCAL DEPTH OF ALBAMYCIN†

Offers maximum antimicrobial action at the earliest possible moment. The antibiotic preparation of first resort in pneumonia of unknown etiology, carbuncles, multiple furunculosis, cellulitis, and infections resistant to previous therapy.

†TRADEMARK, REG. U. S. PAT. OFF. — THE UPJOHN BRAND OF CRYSTALLINE NOVOBIOCIN SODIUM

for the 7 monilia-susceptible types
...tetracycline phosphate plus nystatin

COMYCIN*

PANMYCIN PHOSPHATE PLUS THE ANTIMONILIAL PROTECTION OF NYSTATIN

The logical choice for patients requiring high doses of antibiotics or prolonged antibiotic therapy; for patients with previous monilial complications; for diabetics; patients on corticoids; the pregnant, debilitated, or elderly; and for infants, especially the premature.

Upjohn

The Upjohn Company, Kalamazoo, Michigan

*TRADEMARK, REG. U. S. PAT. OFF.



THE CHOICE OF A SYSTEMIC ANTIBIOTIC IS A MATTER OF CLINICAL JUDGMENT

1. PANMYCIN PHOSPHATE IN COMMON MIXED INFECTIONS

USUAL DOSAGE: ADULTS: 250 mg. every 6 hours or 500 mg. every 12 hours. CHILDREN: Approximately 8 mg. per pound of body weight daily, in four equally divided doses every 6 hours, or two equally divided doses every 12 hours.

SUPPLIED: CAPSULES: 250 mg. in bottles of 16 and 100; 125 mg. in bottles of 25 and 100.

PANMYCIN KM SYRUP: Each teaspoonful (5 cc.) contains tetracycline equivalent to 125 mg. tetracycline hydrochloride, and potassium metaphosphate, 100 mg., mint flavor, in 2 fluidounce and pint bottles.

2. PANALBA IN POTENTIALLY SERIOUS INFECTIONS

USUAL DOSAGE: ADULTS: 1 or 2 capsules three or four times a day, depending on the type and severity of the infection. CHILDREN: Proportionately less.

SUPPLIED: Each powder-blue-and-brown capsule contains Panmycin (tetracycline) Phosphate complex equivalent to 250 mg. tetracycline hydrochloride, and Albamycin (as novobiocin sodium) 125 mg.; in bottles of 16 and 100.

Also available: **PANALBA KM GRANULES** (Pediatric). When reconstituted, each 5 cc. teaspoonful contains Panmycin equivalent to tetracycline hydrochloride, 125 mg. and Albamycin (as novobiocin calcium) 62.5 mg., and potassium metaphosphate 100 mg.; in pleasantly flavored vehicle. Dosage is based upon amount of tetracycline—6 to 8 mg. per pound of body weight per day in 2 to 4 equally divided doses.

3. COMYCIN FOR THE 7 MONILIA-SUSCEPTIBLE TYPES

USUAL DOSAGE: ADULTS: 1 or 2 capsules every 6 hours. CHILDREN: Proportionately less.

SUPPLIED: Each brown-and-pink capsule contains tetracycline phosphate complex, equivalent to 250 mg. tetracycline hydrochloride; nystatin 250,000 units. In bottles of 16 and 100.

Upjohn

The Upjohn Company, Kalamazoo, Michigan

Dr. Hiatt Heads VA Hospital

Russell L. Hiatt, M.D., a graduate of Indiana University School of Medicine in 1920 and former manager of the Veterans Hospital at Fort Wayne, Indiana, has been named manager of the Veterans Hospital in Louisville.

He succeeds H. C. Hardegree, Sr., M.D., who retired December 31 after 10 years as manager of the hospital and 36 years with the Veterans Administration.

Dr. Howard Aids Conservation

C. C. Howard, M.D., Glasgow, announced recently that he is giving a prize of $25 cash to the Future Farmer Chapter and the 4-H Club that turns in orders for the greatest number of trees to be set in Barren county.

Dotor Howard said that the special emphasis on the tree program is in keeping with the overall conservation needs of the county, as 28,000 acres will be more productive in trees than any other crop.

Epilepsy Covered Under Medicare

Epilepsy is classified as a chronic disease under Medicare, according to a release from the Internal Affairs Director of the Kentucky Blue Cross-Blue Shield plans entitled, "Important Facts about Medicare."

The general categories of the cases qualified for payment are: convulsive seizure, cause unknown (previously unsuspected), known cases which injure themselves and require treatment for injury (treated either on inpatient or outpatient basis), known cases having organic lesions of the brain, normally amenable to surgery and such surgery is performed.

Med. Education Week in April

The Association of American Medical Colleges has requested all members of the American Medical Association to join with the nation's 83 medical colleges in helping develop and promote the third annual Medical Education Week, April 20-26.

Objective of the week, of which the AMA is co-sponsor, is to make the public aware of the dramatic progress of medical schools in recent years. The story behind these achievements which benefit the public directly by supplying them with more physicians and medical personnel should be vitally interesting to everyone.

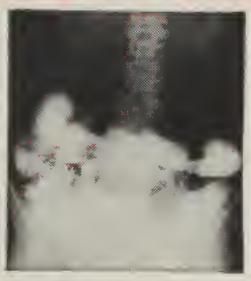
Boyle Co. Educational Fund Formed

Chris Jackson, M.D., Danville, has been elected chairman of the Board of Directors of the newly formed Boyle County Educational Foundation, Inc., a fund established to help needy and worthy county residents in furthering their studies.

The foundation is the outgrowth of a testimonial dinner held in January, 1957, to raise funds for Jack Freeman's (a Danville resident) attendance at Vanderbilt Medical School. It is hoped that the fund will be able to enter one student in school each year, until it is carrying at least four students at all times.

when anxiety and tension "erupts" in the G. I. tract...

IN ILEITIS



PATHIBAMATE*

Meprobamate with PATHILON® Lederle

Combines Meprobamate (*400 mg.*) the most widely prescribed tranquilizer . . . helps control the "emotional overlay" of ileitis — without fear of barbiturate loginess, hangover or habituation . . . *with* PATHILON (*25 mg.*) the anticholinergic noted for its extremely low toxicity and high effectiveness in the treatment of many G.I. disorders.

Dosage: 1 tablet t.i.d. at mealtime. 2 tablets at bedtime. *Supplied:* Bottles of 100, 1,000.

Lederle

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In Memoriam

G. P. BEUTEL, M.D.
Louisville
1878-1957

G. P. Beutel, M.D., a physician in Louisville for more than half a century before his retirement four years ago, died at his home in Louisville on December 18.

Well known as a conditioner of athletes, Doctor Beutel helped condition athletes in training for the 1936 Olympics. A graduate of the University of Louisville School of Medicine in 1898, he also studied at the University of Edinburgh in Scotland and in Berlin. He was a past president of the Louisville Urological Society.

HERMAN T. CARTER, M.D.
Edmonton
1878 - 1958

Herman T. Carter, M.D., county health officer in Barren and Green counties for 20 years, died in a hospital in Glasgow on January 4.

He was a graduate of the Memphis School of Medicine in 1903, and had practiced medicine for 54 years before his retirement in 1953. Before becoming a health officer, he had practiced in Gilbertsville for many years.

ELLIS S. ALLEN, M.D.
Louisville
1877 - 1958

Ellis Saunders Allen, M.D., a Louisville surgeon for more than half a century before his retirement in 1953, died in Louisville on January 11 after a month's illness.

Doctor Allen, who graduated from the University of Louisville School of Medicine with highest honors in 1901, was president of the Jefferson County Medical Society in 1910. He was the founder of one of the first pathological laboratories in the area, the Louisville Research Laboratory. Doctor Allen was a charter member of the Louisville Tuberculosis Association and a member of the American College of Surgeons.

JOHN B. RICHARDSON, JR., M.D.
Louisville
1877 - 1958

John Breckinridge Richardson, Jr., M.D., a Louisville surgeon for half a century, died at the Pewee Valley Hospital on January 12, after an illness of about a month.

A native Louisvillian and the son of a physician, Doctor Richardson was a graduate of the Louisville Medical College in 1904 and started practice in Louisville that year. He served as a captain in the medical corps in 1918 and 1919.

TAKE A LOOK AT
NEW DIMETANE
THE UNEXCELLED
ANTIHISTAMINE

COUNTY SOCIETY REPORTS

McCracken

Members of the State Senate and House of Representatives were guests of the McCracken County Society at their regular monthly meeting in Paducah on December 18.

A summary of the more important legislation that will come before the state legislature was given by Walt Johnson, M.D., who introduced Senator Strother Melton and Representatives Charles A. Williams and Richard C. McGuire, Jr.

The meeting, which was presided over by C. P. Orr, M.D., included the election of officers for 1958. The following were elected: W. B. Haley, M.D., president; Charles Harting, M.D., vice president; Vernon D. Pettit, M.D., secretary-treasurer; Walt Johnson, M.D., Leon Higdon, M.D., and Walker Turner, M.D., delegates to the KSMA; Charles Harting, Chester Blanton, M.D., and D. Y. Keith, M.D., alternate delegates to the KSMA; and Erret Pace, M.D., J. E. Dunn, M.D., and Eugene Blake, M.D., members of the Board of Censure.

Vernon D. Pettit, M.D., secretary-treasurer, gave the financial report for 1957 which showed a treasury balance of $1,256. Dr. Orr reported on the project for setting up a medical library, saying that the Carnegie Library had space to store medical books and that the library staff could check the books in and out. No action was taken on this matter.

Clark

Newly elected officers of the Clark County Medical Society include: John Hubbard, M.D., president; John D. Hummel, M.D., vice president; and Ed Piatt, M.D., secretary-treasurer.

Harrison

J. M. Rees, M.D., was elected president of the Harrison County Medical Society to succeed M. S. Foster, M.D., at the Society's December meeting.

Other officers elected at that time include: Harmon T. Smiser, M.D., vice president; Henry H. Moody, M.D., secretary-treasurer; John P. Wyles, M.D., delegate to the KSMA. Doctor Foster was host to the group at dinner.

Harlan

At the December meeting of the Harlan County Medical Society, Philip J. Begley, M.D., was re-elected president and William H. Anderson, M.D., was elected secretary.

Plans were made for a scholarship loan fund in memory of the late Clark Bailey, M.D. Other items of interest were a recommendation that the State Board of Health appoint James D. Foley, M.D., as a member of the Harlan Board of Health to replace Doctor Bailey and a decision to recommend that Oscar Cawood, M.D., be appointed to replace W. P. Cawood, M.D., who has been unable to serve because of illness.

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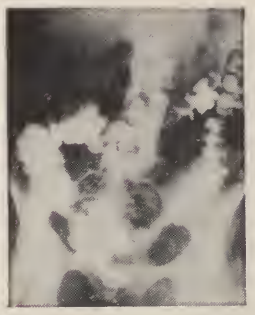
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TABLETS (4 MG.), ELIXIR (2 MG. PER 5 CC.) AND EXTENTABS® (12 MG.) UNEXCELLED POTENCY, UNSURPASSED THERAPEUTIC INDEX AND RELATIVE SAFETY. MINIMUM DROWSINESS AND OTHER SIDE EFFECTS. A. H. ROBINS CO., INC., RICHMOND, VIRGINIA. ETHICAL PHARMACEUTICALS OF MERIT SINCE 1878

Robins

when anxiety and tension "erupts" in the G. I. tract...

in spastic and irritable colon



PATHIBAMATE*

Meprobamate with PATHILON® Lederle

Combines Meprobamate (*400 mg.*) the most widely prescribed tranquilizer... helps control the "emotional overlay" of spastic and irritable colon—without fear of barbiturate loginess, hangover or habituation... *with* PATHILON (*25 mg.*) the anticholinergic noted for its extremely low toxicity and high effectiveness in the treatment of many G.I. disorders.

Dosage: 1 tablet t.i.d. at mealtime. 2 tablets at bedtime. *Supplied:* Bottles of 100, 1,000.

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constitution be brought up-to-date in accordance with the constitution and by-laws of the KSMA. It was decided that the newly appointed legislative committee make this study.

Jefferson

Officers for 1958 were elected at the annual meeting of the Jefferson County Medical Society at the Kentucky Hotel in Louisville on January 20.

New president of the Society is Marvin Lucas, M.D., who succeeds John S. Harter. Other officers are: Foster D. Coleman, M.D., president-elect; Clyde T. Moore, M.D., first vice president; James M. Riley, Jr., M.D., second vice president; Roy H. Moore, Jr., secretary; John R. Smith, M.D., treasurer; and Harry S. Andrews, M.D., and Glenn W. Bryant, M.D., three-year members of the judicial council.

Named delegates to the KSMA were: Max P. Jones, M.D.; Robert L. McClendon, M.D.; Alfred O. Miller, M.D.; F. Alfred Olash, M.D.; William E. Oldham, M.D.; Thomas V. Gudex, M.D.; Benjamin D. Boone, M.D.; Roy A. Martin, M.D.; and Rudolph F. Vogt, M.D.

Alternate KSMA delegates are: George S. Allen, M.D.; Harold W. Baker, M.D.; William C. Durham, M.D.; Rudy J. Ellis, M.D.; Richard F. Greathouse, M.D.; Eugene M. Holmes, M.D.; Clarence E. Quaife, M.D.; Everett N. Rush, Jr., and Robert S. Tillett, M.D.

A resolution was passed—with only one dissenting vote—that the State Health Department remain in Louisville. The Society gave five reasons for keeping

It was suggested by J. V. Pace, M.D., that an executive committee be formed as part of the society organization to cut down on the many items of small business that are handled at regular meetings. A proposal was made that the society's by-laws and the department here and urged the City to provide a new site for the department.

News Items

Owen Pigman, M.D., Whitesburg, KSMA's General Practitioner of the Year in 1957, is convalescing at home following hospitalization for a broken hip.

James T. Linville, M.D., has become associated with Richard R. Slucher, M.D., Buechel, in the practice of general medicine. Doctor Linville, a native Kentuckian, graduated from the University of Louisville School of Medicine in 1956. He interned at Union Memorial Hospital, Baltimore, Maryland.

Paul B. Hall, M.D., has been appointed to the Board of Trustees of the University of Kentucky for a term to expire on December 31, 1961. He replaces Harry Denham, M.D., Maysville, whose term expired on December 31, 1957.

P. C. Sanders, M.D., who resigned as Boyle County Health Officer on January 1 after 35 years of service, was honored by friends and associates with a dinner at the Old Crow Inn in Danville on January 14.

Paul Kerkow, M.D., Covington, was honored by the Campbell-Kenton County Medical Society, on the completion of 50 years of practice on January 9 at a dinner at the Highland Country Club. He received a certificate from the American Medical Association which was presented by James Ryan, M.D., Covington.

New Health Films Available

Two new 10-minute films, "The Silent Killer" and "Out of Step" are now available for use on local television and for showings to school and church groups, according to an announcement by the AMA.

"The Silent Killer" deals with dangers from carbon monoxide poisonings from gasoline exhausts. "Out of Step" tells the dramatic story of an accident which occurs to a child whose father had always been skeptical of safety measures. Both films are available on loan and the only charge is for return shipping. Films may be secured through The Kentucky State Medical Association, 1169 Eastern Parkway, Louisville 17, Ky., or call GL-4-6324.

Nursing Homes Need Survey

The need for accrediting nursing homes and other institutions providing care for the chronically ill is so acute that unless a voluntary program is established, the government will fill the void, according to Kenneth B. Babcock, director of the Joint Commission on Accreditation of Hospitals.

He said he was unwilling to say that the Joint Commission on Accreditation is the vehicle which should do it, but said that if voluntary agencies, like the member organizations of the Joint Commission, don't take it over the government is going to have to. The Joint Commission, which in a voluntary program surveys hospitals and accredits them providing they meet specified standards of care, is sponsored by The American College of Physicians, the American College of Surgeons, the American Hospital Association, the American Medical Association, and the Canadian Medical Association.

Broad Type of Health Ins. Described

A broad type of voluntary health insurance covering doctor's charges for services performed outside the hospital, as well as inside, and offered within the framework of a fee-for-service medical practice, has been reported on by the Health Information Foundation.

The plan, called the Windsor Medical Services, Inc., (in Ontario, Canada) has been in operation 20 years. It serves an urban, industrial community with a population of 160,000 and covers a broad range of doctor's services.

Repository to Safeguard Credentials

The problem of safeguarding medical credentials in case of disaster is being answered by the World Medical Association's plan for supplying a bomb proof, fire proof central repository for physicians' valuable documents.

The repository would safeguard authenticated copies of medical credentials, along with photographs, signatures, fingerprints and personal descriptions. From such a repository, physicians would be able to obtain proof of their medical qualifications should credentials be lost through theft, fire or bombing. Full details on the procedure to be used in utilizing the repository will be available in the near future.

Easter Seal Drive Starts March 10

The 1958 Easter Seal Campaign to supply continuing and expanded care and treatment to crippled children and adults is being conducted from March 10 to April 6.

Through the support of more than 100,000 Kentuckians and the help of 7,000 volunteers, the Kentucky Society for Crippled Children provided direct services to 3,066 physically handicapped persons. In cooperation with other agencies, such as the Kentucky Crippled Children Commission and the State Department of Education indirect services reached an additional 6,944 persons.

PERTINENT PARAGRAPHS

Benefit payments to persons covered by hospital expense insurance policies through the nation's insurance companies have increased more than 500% since 1948, according to the Health Insurance Council. Designed to help pay for hospital bills, these benefits have risen at a faster rate than the cost of Hospital care in the U. S. During the period from 1948 to 1956, hospital charges have increased 125%.

Additional copies of the AMA booklet, "A Planning Guide for Establishing Medical Practice Units," are now available. They may be obtained on a loan basis by contacting the Kentucky State Medical Association, 1169 Eastern Parkway, Louisville 17, Kentucky.

A long range research program on all phases of atomic radiation is being considered by the Atomic Energy Commission. The proposal stems from the recent hearing by the Joint Congressional Committee which pointed up the sharp differences in scientific opinion about the danger of radiation and the lack of precise knowledge of radiation effects. Increased emphasis would be placed on genetic changes in human beings.

Forty-five medical schools are now participating in a special program called Medical Education for National Defense (MEND) which deals with the problems of military and disaster medicine. Endorsed by the AMA's Council on National Defense and Council on Medical Education and Hospitals, the program prepares medical students for military service and meeting medical needs in a disaster.

A survey of patient opinion published in the November 16 issue of *Hospitals,* Journal of the American Hospital Association, showed that the older patient in a small hospital is likely to have the fewest complaints about the quality and quantity of nursing care. The survey conducted by the Public Health Service with the cooperation of the American Hospital Association was conducted among 9000 patients in 60 general hospitals.

The Fifth International Congress on Diseases of the Chest, sponsored by the American College of Chest Physicians, will be held in Tokyo, Japan, September 7-11, 1958. The Congress will be presented under the Patronage of the Government of Japan and the Japan Science Council. Eminent scientists from throughout the world will participate in the discussions, which will be simultaneously interpreted into three languages (Japanese, French, and English) for the Congress.

NEWS ITEMS

Charles L. Price, M.D., who has been associated with Paul E. Goode, M.D., for the past few months, has opened an office for the practice of medicine in Hartford. He is a 1956 graduate of the University of Louisville School of Medicine.

August Helmbold, M.D., Newport, has been elected chairman of the state committee of the Kentucky Armed Forces Advisory Committee. The election was held at a meeting at Fort Campbell in October.

Murray A. Diamond, M.D., former deputy chief of the U. S. Public Health Service's division of personnel, has been named medical officer at the Service's Hospital at Lexington, Kentucky. Doctor Diamond replaced **James V. Lowry, M.D.,** who was recently named deputy chief of the Medical Services Bureau of the service.

Herbert T. Ransdell, Jr., M.D., a graduate of the University Louisville School of Medicine in 1941, has opened an office in Louisville for the practice of thoracic surgery. Doctor Ransdell interned at Grady Hospital in Atlanta, Georgia. After four years of Army duty, he took his residency in general surgery at the Veterans Hospital in Louisville and later went to the University of Georgia Teaching Hospitals where he took post graduate training in thoracic surgery and was a staff member.

John R. Levitas, M.D., who will limit his practice to orthopedics, has opened an office in Louisville. He is a graduate of Northwestern Medical School in Chicago in 1948. Doctor Levitas recently completed his residency training at General Hospital in Cincinnati. He took his residency at Cook County Hospital in Chicago in 1950.

CASE DISCUSSION

(Continued from Page 152)

tection

II. Treatment of the individual case
   A. Dilution and Evacuation
   B. Physiological correction of resultant signs and symptoms

REACTIVE REBELLION

(Continued from Page 150)

8. Murphy, Gardner, *Personality: A Biosocial Approach to Origins and Structure.* New York: Harper, 1947.

9. Redl, Fritz. "Our Troubles with Defiant Youth." *Children.* Jan.-Feb. 1955.

10. Selye, Hans. *The Stress of Life.* New York: McGraw Hill, 1956.

11. Sullivan, Harry. *Conceptions of Modern Psychiatry.* Washington: William Alanson, White Psychiatric Foundation, 1947.

Paintsville Clinic Purchased

Announcement was made recently of the purchase of the Paintsville Clinic Building by A. B. Carter, M.D., and E. H. Skaggs, M.D., of Neon. The building was sold by F. M. Picklesimer, M.D., and D. H. Dorton, Jr., M.D.

Doctors Carter and Skaggs, both natives of Lawrence County, are graduates of the University of Tennessee Medical School in 1931 and 1934, respectively. They have both been associated with the Fleming Hospital in Neon for the past 20 years. They have announced that A. J. Acker, M.D., of the McMillan Hospital in Charleston, West Virginia, will be associated with them in the clinic.

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For the diagnosis and treatment of mental and nervous disorders, and addictions to alcohol and drugs

Psychotherapy and occupational therapy

Electrical shock and insulin therapy as indicated

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ACHROCIDIN*

TETRACYCLINE-ANTIHISTAMINE-ANALGESIC COMPOUND LEDERLE

A versatile, well-balanced formula capable of modifying the course of common upper respiratory infections . . . particularly valuable during respiratory epidemics; when bacterial complications are likely; when patient's history is positive for recurrent otitis, pulmonary, nephritic, or rheumatic involvement.

Adult dosage for ACHROCIDIN Tablets and new caffeine-free ACHROCIDIN Syrup is two tablets or teaspoonfuls of syrup three or four times daily. Dosage for children according to weight and age.

Available on prescription only.

TABLETS *(sugar coated) Each Tablet contains:*

ACHROMYCIN® Tetracycline	125 mg.
Phenacetin	120 mg.
Caffeine	30 mg.
Salicylamide	150 mg.
Chlorothen Citrate	25 mg.

Bottles of 24 and 100.

SYRUP *(lemon-lime flavored) Each teaspoonful (5 cc.) contains:*

ACHROMYCIN® Tetracycline equivalent to tetracycline HCl	125 mg.
Phenacetin	120 mg.
Salicylamide	150 mg.
Ascorbic Acid (C)	25 mg.
Pyrilamine Maleate	15 mg.
Methylparaben	4 mg.
Propylparaben	1 mg.

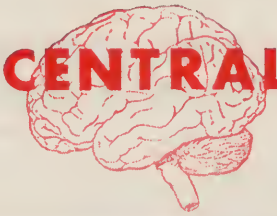
Bottle of 4 oz.

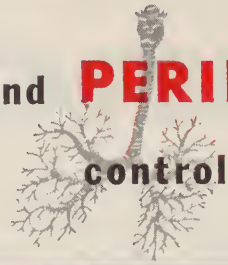


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Both CENTRAL and PERIPHERAL control of cough





SYNEPHRICOL® cough syrup

ANTITUSSIVE • DECONGESTANT • ANTIHISTAMINIC

Combines:

Central Antitussive Effect — mild, dependable
Topical Decongestion — prompt, prolonged

plus Antihistaminic and Expectorant Action

Winthrop LABORATORIES
NEW YORK 18, N. Y.

Synephricol: Neo-Synephrine (brand of phenylephrine) and Thenfadil (brand of thenyldiamine), trademarks reg. U.S. Pat. Off.

Each teaspoonful (4 cc.) contains:

Neo-Synephrine® hydrochloride	5.0 mg.
Thenfadil® hydrochloride	4.0 mg.
Dihydrocodeinone bitartrate	1.33 mg.
Potassium guaiacol sulfonate	70.0 mg.
Ammonium chloride	70.0 mg.
Menthol	1.0 mg.
Chloroform	0.02 cc.
Alcohol	8%

Bottles of 16 fl. oz.

EXEMPT NARCOTIC

NEWS ITEMS

Lloyd P. May, M.D., was recently named health officer for Kenton County. He had been practicing in Danville since his return from the service in May of this year.

P. C. Sanders, M.D., Danville, who is serving his 37th year as Boyle County health officer, has resigned from this position. His resignation was effective December 31, 1957. A graduate of the University of Louisville School of Medicine in 1910, Doctor Sanders was elected Boyle County Health Officer in 1921, and became director of the Boyle County Health Center when it was completed in 1952.

Max E. Blue, M.D., former Madison County health officer, has opened an office for the general practice of medicine in Richmond. A graduate of the Indiana University School of Medicine in 1930, he received post graduate training at Methodist Hospital in Indianapolis and at Children's Hospital in Chattanooga, Tenn. Doctor Blue also studied public health at the University of Kentucky.

C. H. Robinson, M.D., has opened an office in Hopkinsville for the practice of general medicine and obstetrics. Doctor Robinson is a 1951 graduate of the University of Tennessee Medical School in Memphis. He completed his internship while serving in the U. S. Navy for three years. A native of Tennessee, he spent a year in residence at Nashville General Hospital and was in general practice in Lewisburg, Tenn., prior to coming to Hopkinsville.

James H. Callis, M.D., a native of Hanson, Kentucky, will open an office for the general practice of medicine, in Owensboro. A graduate of the University of Louisville in 1956, Doctor Callis interned at St. Mary's Hospital in Evansville, Indiana. He served in the air force from 1944 to 1946.

H. V. Johnson, M.D., Georgetown, who has been practicing medicine in Scott County since 1907, reviewed "Fifty Years in Public Health in Scott County," at the November meeting of the Scott County Historical Society.

C. W. Christine, M.D., gave up his private practice on December 1 to assume the duties of senior grade physician at the Veterans Hospital in Fort Thomas. A native of Tacoma, Washington, Doctor Christine has been a private physician in Maysville and a member of the Mason County Board of Health since 1943.

Victor E. Scherer, M.D., has opened an office in Scottsville for the general practice of medicine. A native of Maryland, Doctor Scherer graduated from the University of Western Ontario Faculty of Medicine in 1945. He interned at General Hospital in Nashville and served three years of residency at Baylor University Hospital in Dallas and Vanderbilt University Hospital in Nashville. Since February of 1956, he had been practicing in Fountain Run.

John Simmons, M.D., has accepted a four year surgical residency at Norwood Clinic in Birmingham, Alabama. One year of training will be spent at the University of Pennsylvania Medical School. His residency will begin July 1, 1958.

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The Fifteenth Annual Meeting of the American Psychosomatic Society will be held in Cincinnati at the Netherland Hilton Hotel on Saturday and Sunday, March 29 and 30. The program includes 16 presentations of studies furthering the psychosomatic or holistic approach to clinical medicine and human physiology. Full programs may be obtained for the Society office, 551 Madison Avenue, New York 22, N. Y.

PERTINENT PARAGRAPHS

The American Society for the Study of Arteriosclerosis will hold its 1958 annual meeting simultaneously with the 31st Annual Scientific Sessions of the American Heart Association in San Francisco, October 24-26. Several joint programs are being planned at that time.

The American Heart Association has received a special grant from the National Heart Institute to permit a limited number of research scientists in the cardiovascular field to attend the third World Congress of Cardiology in Brussels, Belgium, September 14-21. Funds will provide for round trip air travel from New York City to Brussels plus a per diem allotment during the Congress. Younger investigators who would otherwise have difficulty in obtaining funds for this purpose will be given preference. Requests for information and application blanks should be addressed to the Assistant Director Medical Research, American Heart Association, 44 East 23rd St., New York 10, N. Y. Deadline for applications in February 20, 1958.

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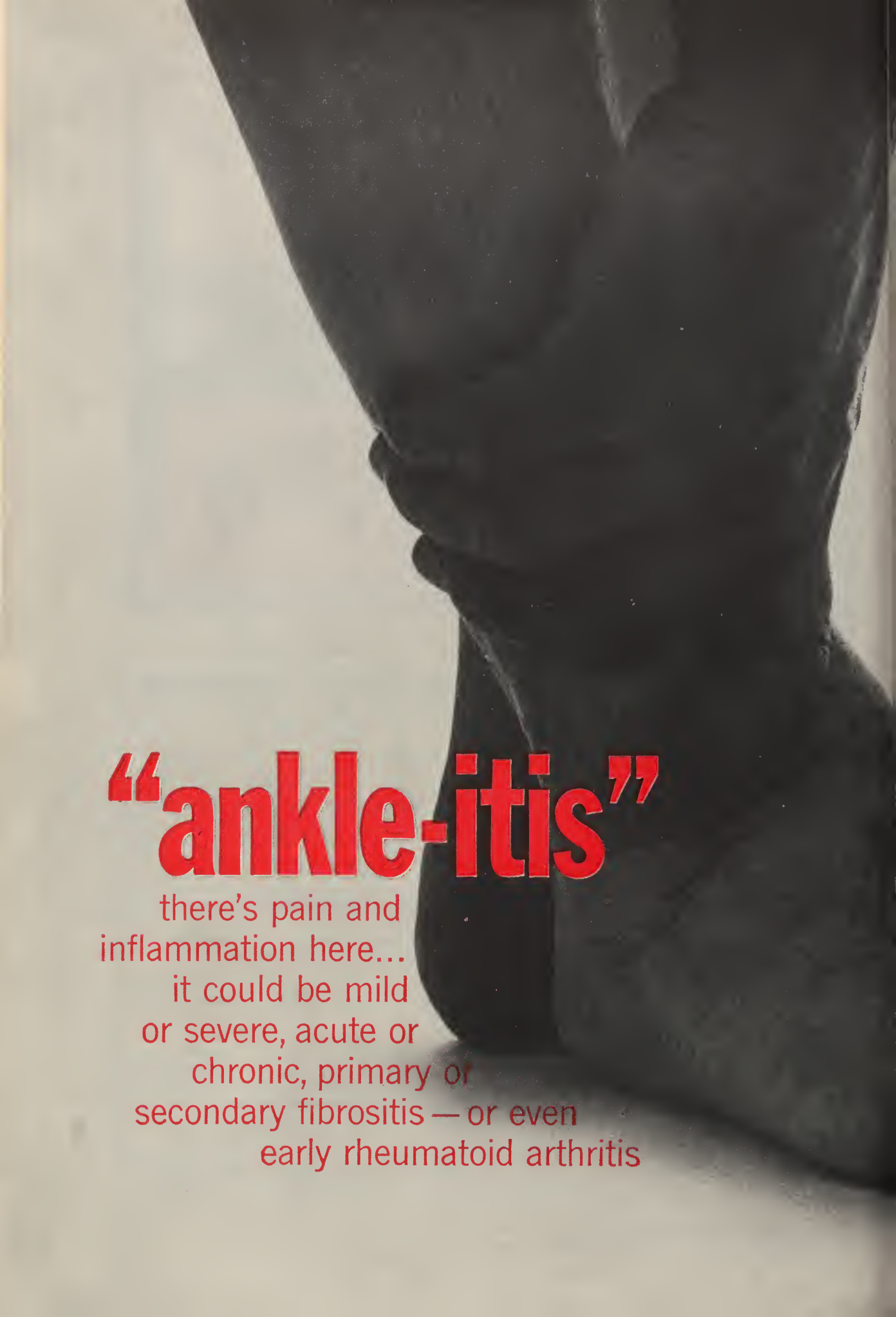
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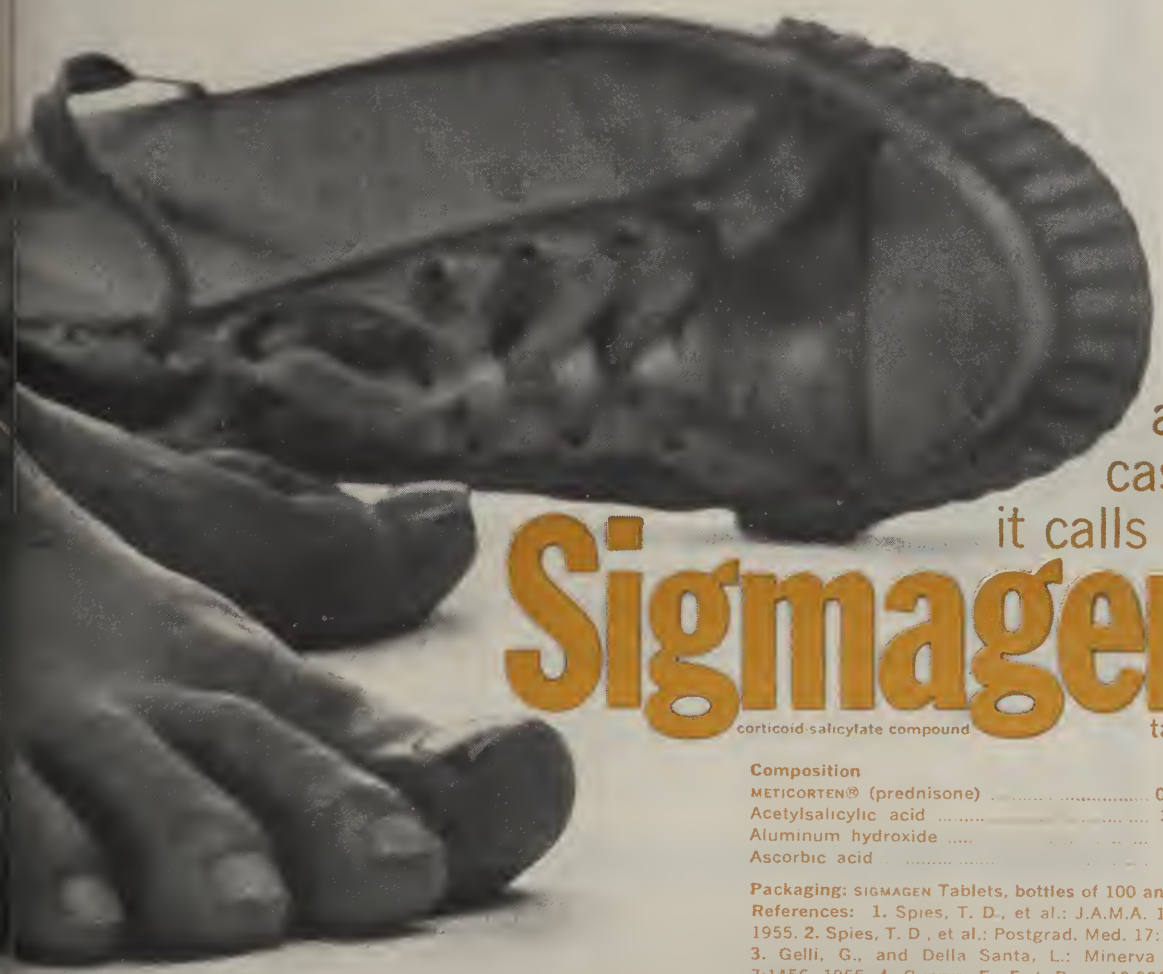
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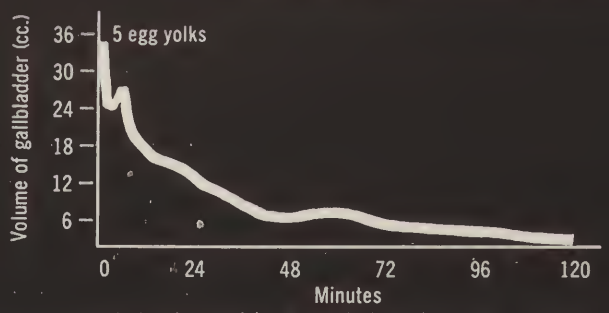
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2. Bleiberg, J.: J. M. Soc. New Jersey *53*:37, 1956.
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4. Welsh, A. L., and Ede, M.: Ohio State M. J. *50*:837, 1954.
5. Bleiberg, J.: Am. Practitioner *8*:1404, 1957.

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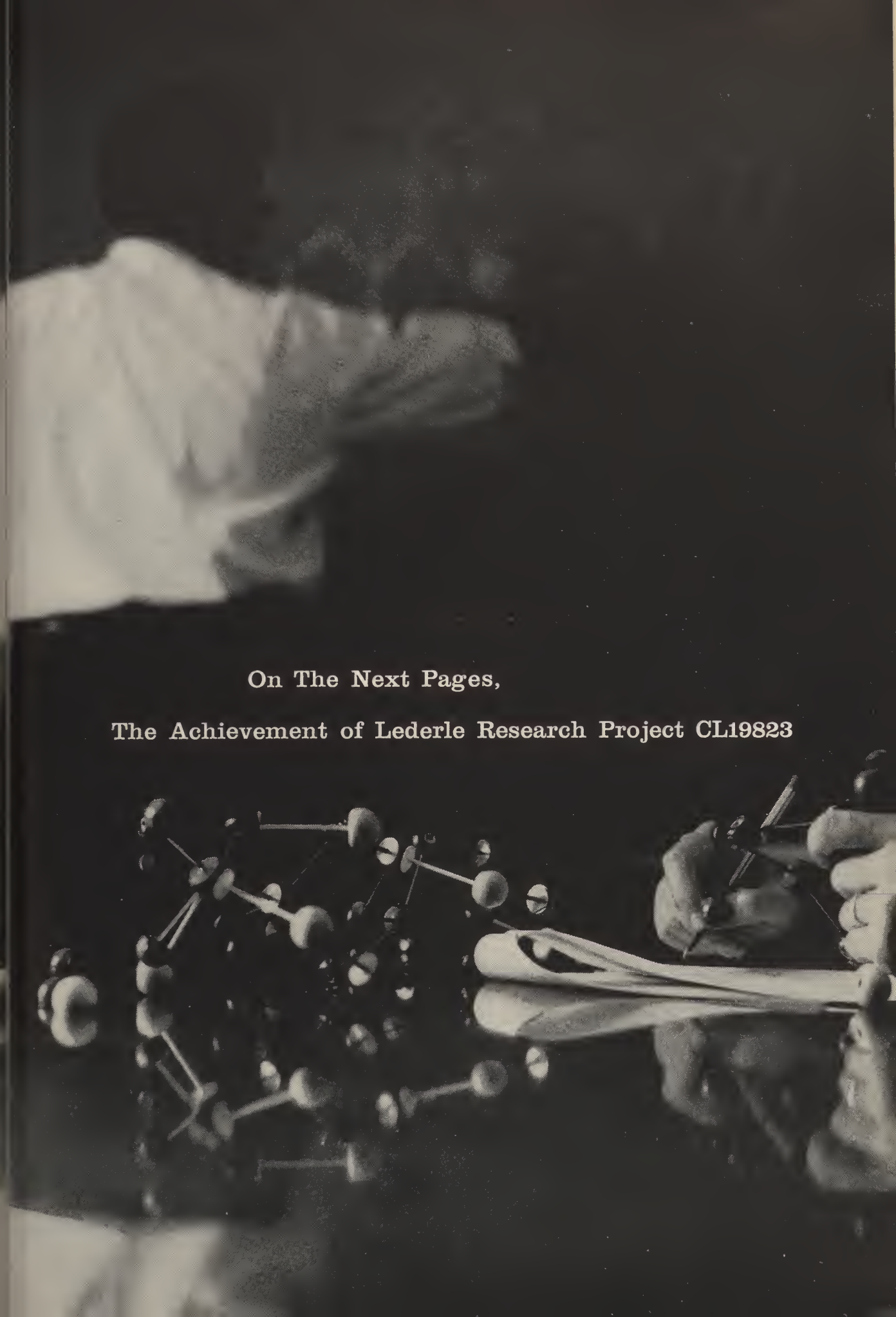
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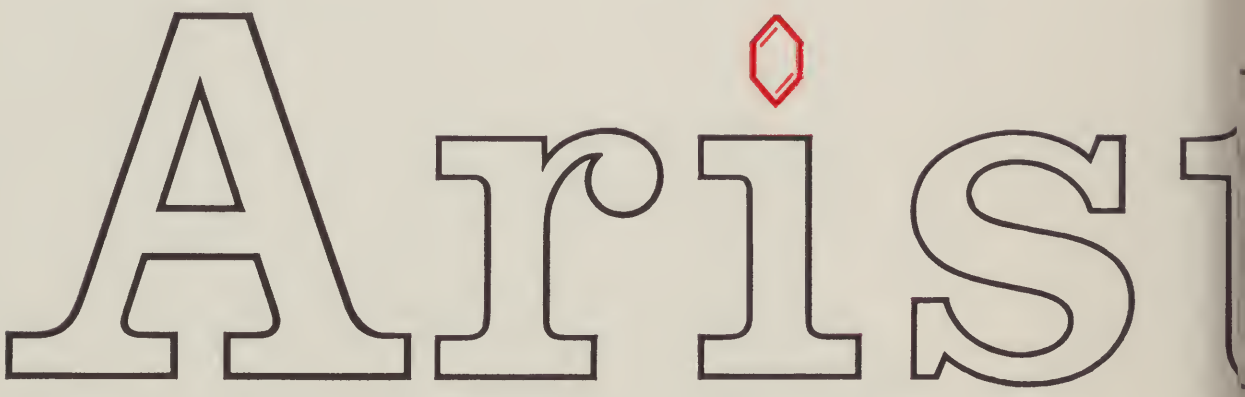
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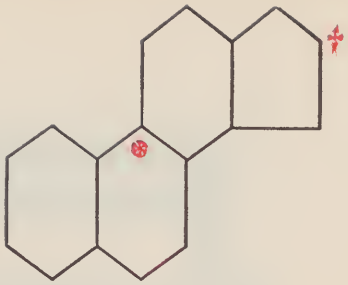
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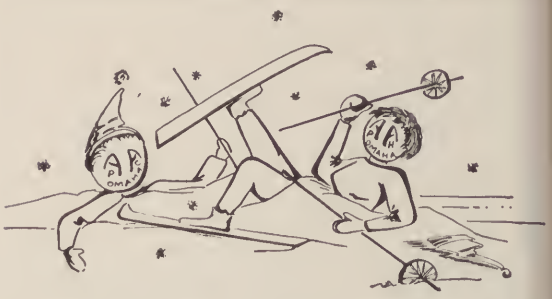
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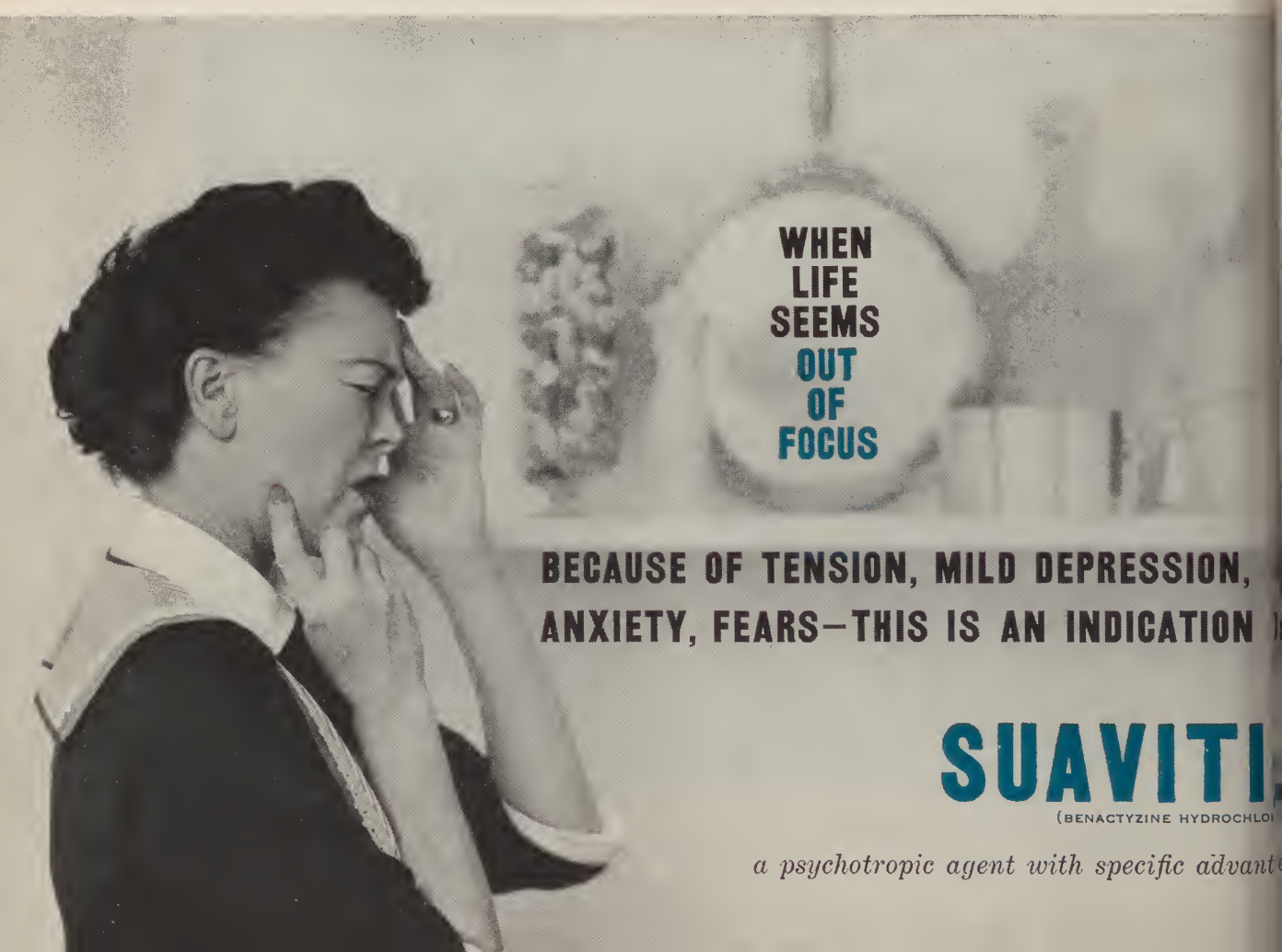
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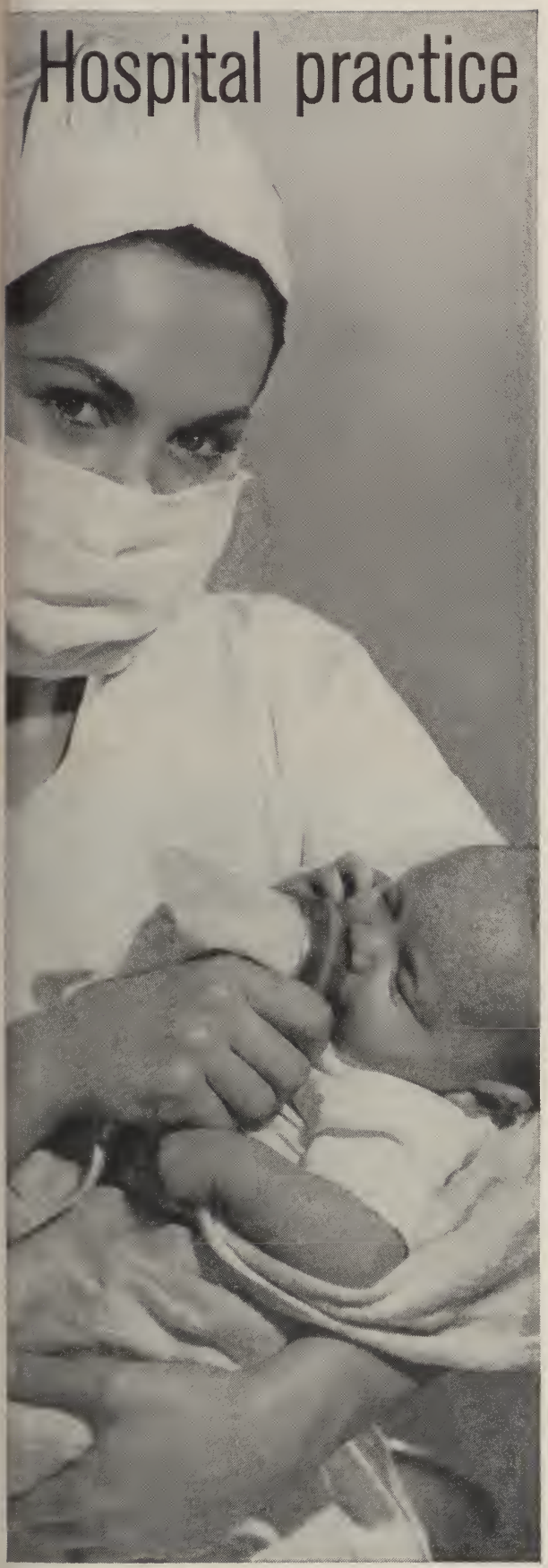
Corrin, K. M.: Am. Pract. & Dig. Treatment 8:721 (May) 1957.

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Evap. Milk . .	4 oz	5 oz.	6 oz.
Water	14 oz.	13 oz.	12 oz.
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Whole Milk . .	8 oz.	9 oz.	10 oz.
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Friday, March 7

"The Significance of Muscle Enzymes in the Management of Heart Disease"
JOHN S. LA DUE, M.D., Associate Professor of Medicine, Cornell University Medical College, New York, New York.

"Surgical Treatment of Coronary Artery Disease"
ORMAND C. JULIAN, M.D., Associate Professor of Surgery, University of Illinois School of Medicine, Chicago, Ill.

"Medical Management of Patients with Coronary Disease"
WILLIAM DOCK, M.D., Professor of Medicine, State University of New York Downstate Medical Center, Brooklyn, N. Y.

"Cine-cardioangiography in the Diagnosis of Congenital and Acquired Heart Disease"
F. MASON SONES, JR., M.D., Department of Cardiovascular Diseases, Cleveland Clinic, Cleveland, Ohio.

"Heart Disease in Pregnancy"
JAMES METCALFE, M.D., Harvard University and Boston Lying-in Hospital, Boston, Mass.

"Clinical Aspects and Treatment of Congestive Heart Failure"
E. HUGH LUCKEY, M.D., Professor of Medicine, Chairman of Department, Cornell University Medical College, New York, N. Y.

Saturday, March 8

"Physiology of Hypertension"
G. E. WAKERLIN, M.D., Professor and Head, Department of Physiology, University of Illinois School of Medicine, Chicago, Ill.

"The Practical Management of Hypertension"
EDWARD D. FREIS, M.D., Chief, Medical Service, Veterans' Administration Hospital, Washington D. C.

"Electrolyte Balance and Congestive Heart Failure"
WILLIAM B. SCHWARTZ, M.D., Associate Professor of Medicine, Tufts University School of Medicine, Boston, Mass.

"Electrocardiography"
G. E. BURCH, M.D.
Henderson Professor and Chairman, Department of Medicine, Tulane University School of Medicine, New Orleans, Louisiana.

"Auscultation of the Heart"
W. PROCTOR HARVEY, M.D., Director Heart Station, Georgetown University Medical Center, Washington, D. C.

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1. Waldman, S., and Pelner, L.: Am. Pract. & Digest Treat. *8*:1075 (July) 1957.

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Ford, R.V., and Moyer, J.H.: Rauwolfia Toxicity in the Treatment of Hypertension: Some Observations on Comparative Toxicity of Reserpine, a Single Alkaloid, and Alseroxylon, a Compound Containing Multiple Alkaloids, Postgrad. Med., January, 1958.



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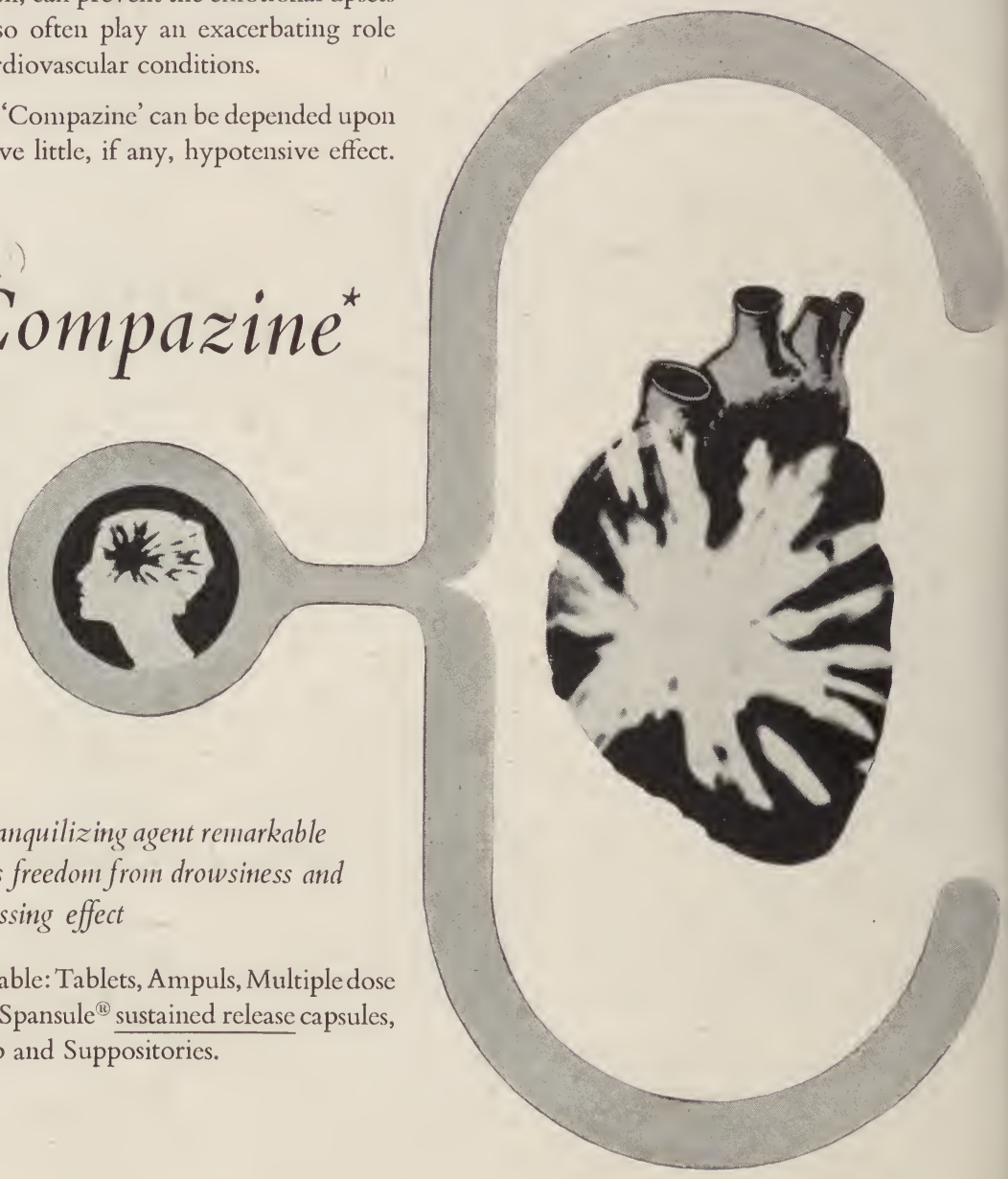
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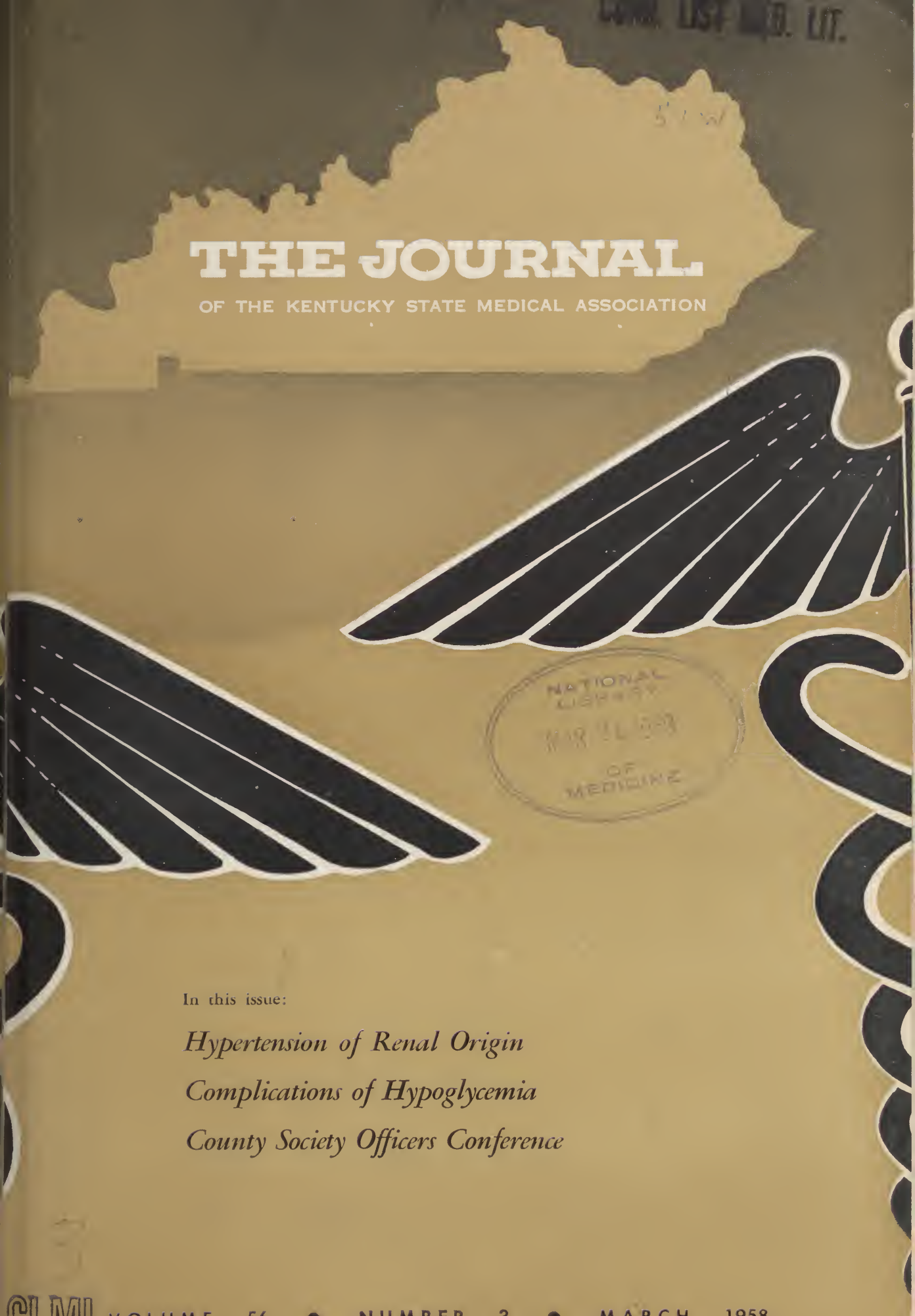
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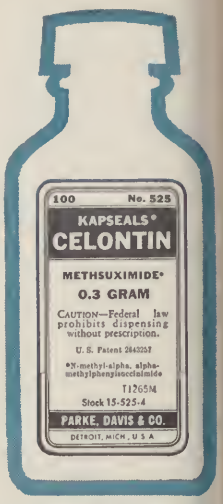
Hypertension of Renal Origin

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1. Zimmerman, F. T., and Burgemeister, B.: *Arch. Neurol. & Psychiat.* 72:720, 1954.
2. Zimmerman, F. T., and Burgemeister, B.: J.A.M.A. 157:1194, 1955.
3. Zimmerman, F. T.: *Arch. Neurol. & Psychiat.* 76:65, 1956.



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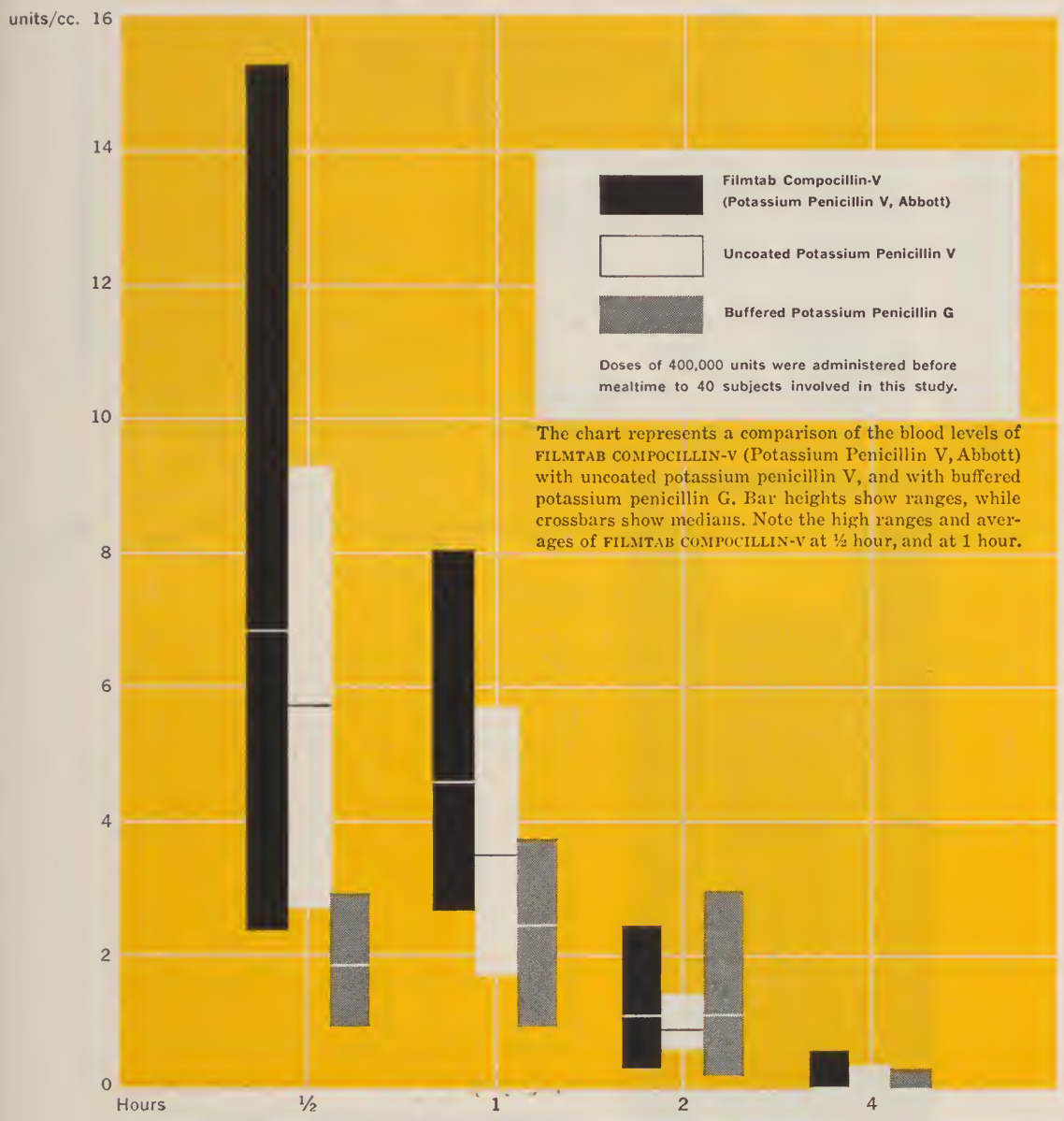
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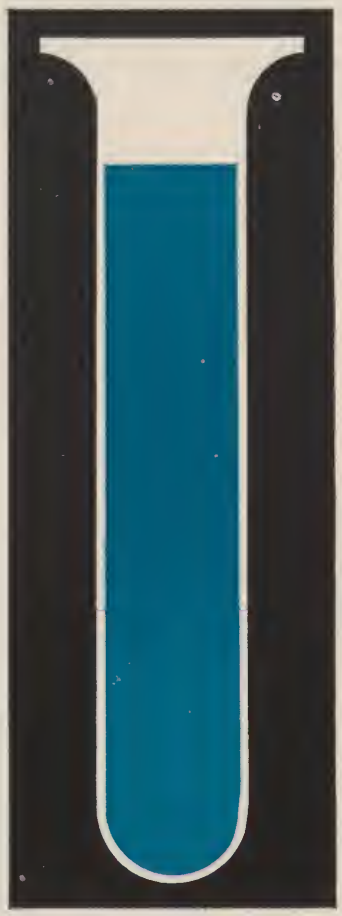
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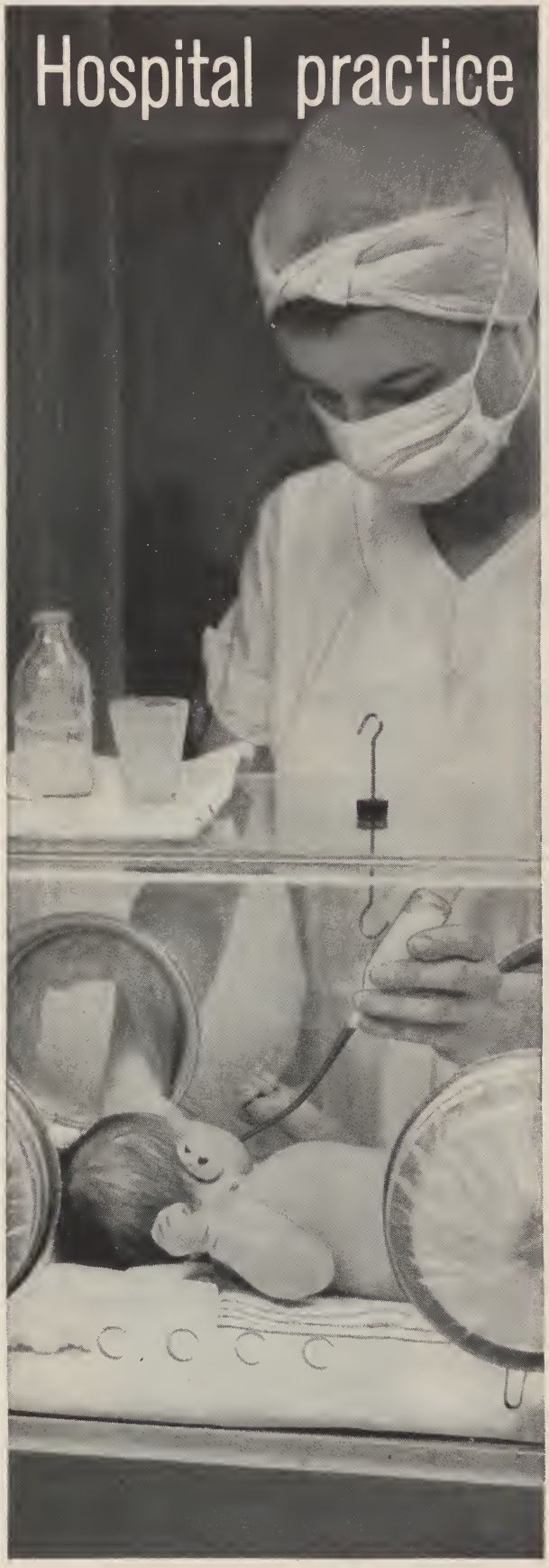
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Hospital practice of infant feeding

Standard formulas for PREMATURES

Breast milk is satisfactory for the feeding of prematures in spite of the low protein and mineral and high fat content. But eventual formula feeding should provide a high protein and carbohydrate to satisfy the rapid-growing needs of the premature and low fat content because of limited digestive capacity.

Feedings of small prematures are most effectively administered by the indwelling polythene nasal catheter and of large prematures, by bottle with small nipples.

The first six feedings should be a sterile 5% solution of Karo Syrup at 2 to 3 hour intervals; for subsequent feedings, breast milk or formula should be added in gradually increasing amounts according to tolerance and requirements, as indicated in the table below.

Initial feeding schedules for premature infants

(Feedings Started After 36 Hours and Continued at 2 to 3 Hour Intervals)

FEEDINGS	COMPOSITION	QUANTITY
First Six	5% Karo	2-5 ml.
7th and 8th	2 parts 5% Karo 1 part breast milk or formula	6-10 ml.
9th and 10th	1 part 5% Karo 1 part breast milk or formula	8-15 ml.
11th and 12th	1 part 5% Karo 2 parts breast milk or formula	10-18 ml.
Subsequently	Breast or formula feeding	12-20 ml.

ADVANTAGES OF KARO® IN INFANT FEEDING



Composition: Karo is a superior maltose-dextrin mixture because the dextrins are non-fermentable and the maltose is rapidly transformed into dextrose which requires no further digestion.

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LOCAL IRRITATION IS REDUCED and control is instituted against spread of infective organisms and loss of body fluid.

PALATABLE creamy pink, fruit-flavored CREMOMYCIN is pleasant tasting, readily accepted by patients of all ages.

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message from the President

Monopolism

THE Preamble of the Constitution of the United States says: "We, the people of the United States, in order to form a more perfect Union, establish justice, insure domestic tranquility, provide for the common defense, promote the general welfare, and secure the blessings of liberty to ourselves and our posterity, do ordain and establish this Constitution for the United States of America."

This hallowed document has withstood the test of time. Under it we have become the greatest nation in the world. We have prospered and have become the leading light for freedom. We are the envy of all fettered people.

The founders of our country decided we should have a republican or representative form of democracy. Under this form of government the people govern themselves, but they do it by entrusting the entire administration of the state to their representatives whom they choose for that purpose. The Constitution contains in separate articles, provisions for three great departments of government—legislative, executive, and judicial. The powers of each of these departments are significantly different. The doctrine of separation of powers is that no one of those three branches is to encroach upon another, except insofar as authorized by the Constitution. Essential functions of the legislative are not to be unsurped by the Executive nor by the Judiciary. The purpose of this is to avoid a dangerous concentration of power, and respective powers are assigned to departments best fitted to execute them.

The Constitution was enacted to protect the rights of the individual, both singly and collectively, for the good of the nation as a whole. It naturally followed the Declaration of Independence which stated that all men are created equal with inalienable Rights, and to secure these Rights, governments are instituted among men, and derive their just powers from the Consent of the Governed. This Government of the United States of America was not established for a favored few or group of individuals. It was not originated for a monopoly of power by any group of individuals. The founders of these United States spelled out explicitly the powers of the various branches of the government. They did not intend that the government itself should be a monopoly; nor did they mean that the government should be controlled by monopolies.

Monopoly implies exclusive rights, possessions, privileges or control of an article, thing or power. A monopoly exists when a person or persons have no alternative source of supply, and must purchase or use what the monopolist offers. Monopoly in government, or government subservient to monopolies of various forms, leads to the downfall of that government or to economic and political serfdom of its citizens, with eventual loss of freedom. Whenever a group of individuals so control the economy of the nation, that the individual, and the government itself, is dependent for its existence on that group of individuals we have monopoly of power; and that monopoly of power leads to Socialism, Communism, chaos and destruction. History is filled with this, and all such governments end in ruin. Conspiracies in the restraint of trade have generally been held not legal by the courts, both during and since the Middle Ages.

The antimonopoly policy of the United States has existed for a long time. The Sherman Anti-Trust Act (1890) outlawed trusts, monopolies and conspiracies in restraint of trade, and made attempts to establish such restraints as criminal offences. The Clayton Act (1914), establishing the Federal Trade Commission, made it responsible for preventing unfair competition tending to restrain trade, and prohibited interlocking directorships and various other monopoly procedures. The Federal Trade Commission attempts to stop unfair competition which might lead to monopoly. The Department of

when anxiety and tension "erupts" in the G. I. tract...

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Justice through its anti-Trust Division prosecutes Sherman Act violators. In recent years it has developed the consent decree, by which the Department of Justice will terminate prosecution in an antimonopoly suit if the defendants will agree not to perform certain acts in the future.

Our government has recognized the dangers of monopolistic methods and powers and has acted against them in the past, but still dangerous monopolies do exist. The government itself is becoming a giant monopoly. Daily it controls more and more of our very being. It is becoming all powerful and has repeatedly added more chains to an already overfettered people. It has allowed groups of individuals to band together to form immense organizations which dictate to the government itself. Some of these organizations are powerful enough to disrupt the entire economy of America. If and when this happens, then the government and its citizens become subservient to a minority group. And such slavery results when the means of communication, education, labor, commerce, etc. are under monopolistic regimes.

The founders and citizens of this country have recognized that the preservation of freedom and liberty depend on the absence of arbitrary power by the government, private persons or institutions. Our government today seems to have forgotten this axiom.

Abraham Lincoln's statement, "No man is good enough to govern another man without the other's consent" is still true today, and for all time.

Power makes for monopoly and monopoly makes for dictatorship, and dictatorship makes for slavery and eventual ruin.

E. B. Wersch M.D.

Remember . . .

Co. Soc. Officers Conference

Thursday, March 27, 1958

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Central Daylight Saving Time

PUBLIC HEALTH PAGE

Hazards of Radiation

RUSSELL E. TEAGUE, M.D.
Commissioner of Health, Commonwealth of Kentucky

IN considering the overall hazards of ionizing radiation in the field of public health, aside from those relating to radioactive fallout resulting from the testing of thermo-nuclear weapons and other atomic devices, particular emphasis must be placed on existing sources of radiation. All forms of life, including man, are constantly exposed to small amounts of cosmic radiation over which we have no control. We are also continually breathing and taking into our system radioactive material such as radium, uranium, thorium and radioactive potassium which occur naturally in our environment of air, soil and water. Chronic exposure to X-rays by technicians and patients constitutes one of the principle types of exposure to radiation. More recently, the industrial peace-time use of fissionable materials and their by-products has produced another main source of hazardous radiation.

The public health agencies, being the only organized bodies concerned with the total radiation hazards, are approaching the problem with the best available present-day knowledge and information. The main consideration in this approach is that exposure should be reduced to the lowest permissible tolerances and to a level which would permit satisfactory diagnostic and therapeutic results. A permissible dose is generally defined as that dose which will cause minimum injury to the human body at any one time.

It is important to differentiate between the chronic effects of radiation exposure as contrasted to those of the acute nature. Acute radiation is usually associated with large instantaneous exposures due mostly to accidents. The symptoms in this case will appear in a relatively short time of a few days or weeks. Of more serious concern, however, to the public health profession is the problem dealing with chronic or long-term, low-level radiation exposure. In this area it is difficult and, at this time, impossible to predict the extent of danger to human beings. The symptoms will be delayed for many years and probably beyond the lifetime of those who have been exposed.

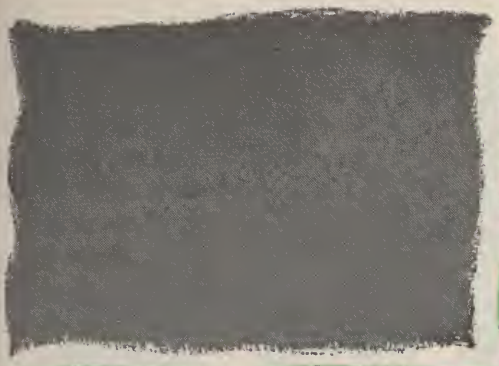
The effects of cumulative radiation are still not too well defined and remain a matter of conjecture, whereas the immediate effects of lethal and sub-lethal doses of radiation have been observed. Some reported probable long-term effects are shortening of life span, genetic changes in later generations, decreased fertility, cataract formation, carcinogenesis and embryological changes. It may be generally assumed that there is no level of radiation exposure below which some damage does not occur to the human body.

The medical and dental radiation exposure may be regarded as the largest single source of radiation to the general public. The most important consideration in this respect is that such exposures may well be acceptable in the absence of background exposure. However, since natural radiation must be added to that which is artificially produced, the entire problem must be carefully appraised. The responsibility and justification of patient exposure to ionizing radiation primarily rests with the medical and dental profession.

The occupational health aspects of radiological health are as varied as are the sources emitting ionizing radiation. This aspect of public health may be divided into two basic categories, the monitoring and control of X-ray and fluoroscopic units employing high voltage cathode ray tubes and the monitoring and control of industrial and medical use of radioactive by-product material. At present some of the uses of radioactive material in these fields respectively include density gauges, flow controllers, static eliminators, industrial radiology; thyroid uptake, red cell mass and blood volume studies. Several radiological health surveys have been conducted by the Kentucky State Department of Health on the industrial radioactive sources and their utilization including one on the status of the shoe fitting fluoroscopes.

The results of the surveys involving the use of radioactive by-product material indicate that adequate protective measures are now being employed. This favorable condition is largely attributed to the AEC regulations and supervision. The survey on the fluoroscopic shoe fitting devices revealed that many of these machines are in need of corrective maintenance and that their use is not essential other than a sales stimulus. However, present regulations on these machines provide for satisfactory control of their use. The Kentucky Occupational Health regulations contain specific requirements for the operation of shoe fitting fluoroscopic devices and general regulations pertaining to employee exposure to X-ray or gamma radiation from other sources.

In view of the many aspects of the problems of radiation hazards a more complete and comprehensive program in the investigation of low-level radiation hazards is needed. The federal, state and local health agencies are cooperating closely in the promulgation and in the enforcement of radiation health requirements and regulations. The U. S. Public Health Service, Atomic Energy Commission, Federal Civil Defense Administration and other governmental agencies are making available numerous radiological and related environmental training courses for public health personnel.



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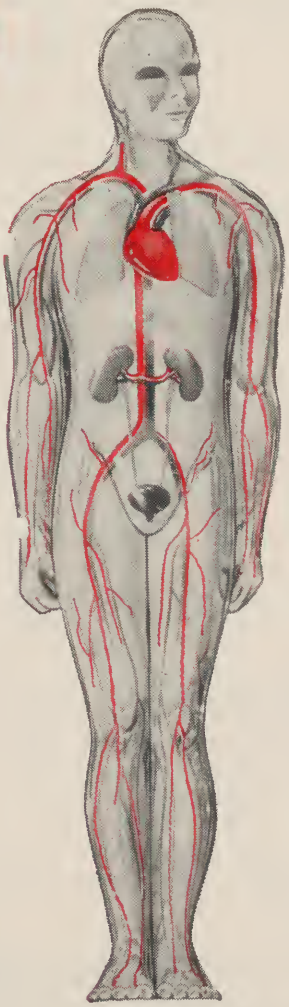
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The dosage of other antihypertensive medication (reserpine, hydralazine, etc.) is adjusted as indicated by patient response. If the patient is established on a ganglionic blocking agent (e.g., 'INVERSINE') this should be continued, but the total daily dose should be *immediately* reduced by 25 to 50 per cent. This will reduce the serious side effects often observed with ganglionic blockade.

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Smooth, more trouble-free management of hypertension with 'DIURIL'

IN THE BOOKS

AN ATLAS OF CARDIAC SURGERY: by Jorge A. Rodriguez, M.D.; published by W. B. Saunders Company, Philadelphia and London, June 26, 1957; 250 pages; price, $18.

This Atlas would appear to be a monumental work, representing the labors of a doctor who is also an excellent artist. The material was obtained and authenticated by visiting the major cardio-vascular surgical centers in the United States, and observing the actual surgical procedures about which he was writing and making drawings. The sketches, made at the operating table, were later corrected and labelled with the assistance of the operating surgeon. It is hard to state whether this Atlas will be of greatest value to medical students, interns, family physicians, or surgeons actually performing cardio-vascular operations; certainly it has appeal and usefulness for all. The illustrations are clear, beautifully labelled, and well described on the adjacent pages, and the numbering of each step is so carefully outlined that it would be clear to even the most inexperienced in the medical field.

Twenty-nine procedures in all are carefully illustrated, step by step. In addition there is a section on the surgical anatomy of the heart and great vessels, as well as concise explanations of various implements and adjuvant devices employed in cardio-vascular surgery. The explanation of the mechanical extracorporeal circulation and hypothermia for cardiac surgery, as well as the various techniques of suturing, are all described in such detail as to leave no doubt in the reader's mind.

It would appear that this Atlas will rapidly become a standard item in every medical library where it will serve both as a basic textbook for the uninitiated student of medicine as well as a simplified do-it-yourself kit for the cardio-vascular surgeon. The outstanding men in the United States who have helped make the field of cardio-vascular surgery what it is today, are all represented with the exception of Robert E. Gross. However, at least four of his former residents and fellows are included in this text.

Hugh B. Lynn, M.D., F.A.C.S.

CURRENT SURGICAL MANAGEMENT: John H. Mulholland, M.D., editor-in chief; Edwin H. Ellison, M.D., and Stanley R. Friesen, M.D., editors, published by W. B. Saunders Company, Philadelphia and London, July, 1957; 494 pages; illustrated; price, $10.

This work is a unique and refreshing attempt to summarize common controversial surgical problems that require solution by general surgeons in their day to day practices.

Each of the various topics is reviewed by a surgeon, noted for his literary contributions on the subject. The problems are listed under various discussion provoking titles, such as Recurrent Pancreatitis, Choice of Operation for Duodenal Ulcer, Portal Hypertension with Esophago-gastric Varices, Wedge Resection versus Subtotal Gastrectomy for Gastric Ulcer, Regional Ileitis, Papillary Carcinoma of the Thyroid, Carcinoma of the Cervix, etc.

Unlike most reports in the literature, the particular discusser of the subject presents his own philosophy as regards management of cases in his practice. These discussions are brief and succinct, making it easy for the reader to review the sometimes markedly divergent approaches to these moot surgical problems. Likewise, there is minimal reference to prior reports and only those essential statistics to support the surgeons' approach are utilized.

As stated in the preface, it is a paradox that writings on surgery in this period of modern medicine, with extensive research, can be so controversial; whereas, in the past years of little advancement of knowledge, the writings were characterized by extreme dogmatism. Certainly this book demonstrates that there is often more than one approach to the solution of a common problem.

In summary, it is an unusual, entertaining book by means of which the practicing surgeon can explore the beliefs and philosophies of prominent surgeons as regards controversial problems.

David W. Kinnaird, M.D.

IT PAYS TO BE HEALTHY: by Robert Collier Page, M.D.; published by Prentice Hall, Inc., Englewood Cliffs, New Jersey, September, 1957, 285 pages; price, $4.95.

Here is a volume chock full of valuable advice to everyone desirous of living a full, productive, healthy happy life. Simply written, easily read, it deals with the problems of people in all walks, from the prominent executive with large income to the most insignificant janitor. Not only does the author stress the good roads to health and success but the various pitfalls and detours are well marked, the danger signals emphasized. He objects to the words "occupational" or "industrial" medicine, although his tremendous experience must have been in this area. He prefers to look on himself as a health consultant.

Viewing life through a wide angle lens he brings into clear focus the problems and tensions of everyday life. The necessity of conscious sane living is always foremost in the picture. Here is a real guide book.

The advice to young people starting out on a business career, those between the ages of 20 to 40 years, is valuable. Preventive Medicine is the keynote. With crystal clearness many substantial problems which let alone might result in functional disorders are plainly exposed.

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(Continued on Page 282)

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"Furthermore, the duration of this beneficial action is prolonged sufficiently to make this method of treatment of practical clinical value."

Riseman, J. E. F., Altman, G. E., and Koretsky, S.: Nitroglycerin and Other Nitrites in the Treatment of Angina Pectoris, Circulation (Jan.) 1958.

* 'Cardilate' brand Erythrol Tetranitrate SUBLINGUAL TABLETS, 15 mg. scored



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WASHINGTON NEWS DIGEST



Washington, D. C.—Those who are trying to follow the course of medical legislation, find an unusual situation developing in this session of Congress. All of Washington is being subjected to forces, some completely new, that often work at cross-purposes to each other. The result could be a moratorium on health legislation—or again it could be a flood of new laws.

At the start of the session, a new-born interest in science completely dominated the scene—by a frantic spending of billions of dollars we would overtake Russia. That was the theme in Washington, and it persisted despite a few quiet voices that asked whether Russia really had far outdistanced the U.S. or was merely exploiting a slight advantage.

Even before the American satellite started on its orbit, some of the panic had subsided, and most of the legislators had decided that advent of the space age had not removed all of the old problems and opportunities in legislation and politics. The familiar issues were still there, medical panaceas included.

The shock of Russian achievements will, at any rate, produce legislation designed to shove up our education system. This seems to be generally accepted. For the medical profession, two provisions are of major interest. Scholarships would be either four years—possibly six—offering some assistance to premed students and in some cases to those in their first year of medical school. Also, fellowships would be available for medical and other graduates if they wanted to teach or go into research.

The administration's idea was a program that would cost a billion dollars; several leading Democrats joined in a bill proposing three billion dollars as a stimulant to mathematics and science.

But there are other factors to be reckoned with. For the first time a President set down in black and white in his budget just how he proposed to withdraw the federal government from some activities, or limit its participation, and turn the programs back to the states. Mr. Eisenhower wants to slow down on Hill-Burton Hospital construction program and change its emphasis, he wants to mesh in some veterans' benefits with social security payments, he would have the states do more and the U.S. less in public assistance (where medical payments are a growing factor), and he hopes to get Congress to drop the $50 million a year program of grants to help build water treatment plants.

Whether Congress will follow the President's lead in the back-to-the-states movement is another question. At least he has said specifically what he thinks should be done, and when.

There was no expectation that the Russian scare would dilute politics this election year—and it hasn't. If anything, the partisans are struggling harder than ever to make records that will reflect glory on them next November. Some of course, would be pressing for their projects regardless of the election.

So this is the prospect, in brief:

The Defense Department and science will get the major attention and the major money, but some may spill over into medicine.

There is some interest in a tight domestic budget and returning certain activities to the states, but old fashioned politics combined with a fear of a continuing recession may again open up the federal purse.

Medical legislation, always a popular subject, may get more and more attention as the session rolls on. If so, the Forand bill among others would come immediately to the fore.

NOTES:

Several developments in the legislative field on Jenkins-Keogh bills came early in the session. The American Thrift Assembly, representing some 10 million self-employed, urged favorable House Ways and Means action, and the American Medical Association pointed out that the proposal for tax deferment of money paid into retirement plans could help solve the problem of maldistribution of physicians.

In the Senate, a majority of the Small Business Committee introduced a tax relief bill with a J-K provision. The section would allow anyone not now benefitting from a qualified pension plan to set aside 10% of annual income ($1,000, maximum). The bill went to Senate Finance Committee.

* * *

A limited number of medical scientists from this country and Russia will give lectures in each other's countries this year in an exchange program worked out by the State Department and the Soviet Government. Also planned are exchanges of medical journals between medical libraries and of medical films. All these are part of a broad scientific, cultural and education program between the two nations. Details haven't been worked out.

* * *

Six members of the Health Resources Advisory Committee have been named by Defense Mobilizer Gordon Gray. The committee, headed by Dr. Elmer Hess, advises government on health and medical problems in time of war or national emergency. Members are Dr. George C. Whitecotten, Oakland, Calif., Dr. Franklin Yoder, Cheyenne, Wyo., Dr. Mary Louise Gloechner, Conshohocken, Pa., Harold Opp'ce, DDS, Chicago, Dr. William Walsh, Washington, D. C., and Frances Graff, RN, Grand Rapids, Mich.

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"Cardiac patients who show significant manifestations of anxiety should receive ataractic treatment as part of the therapeutic approach to the cardiac problem."[1]

1. Waldman, S., and Pelner, L.: Am. Pract. & Digest Treat. *8*:1075 (July) 1957.

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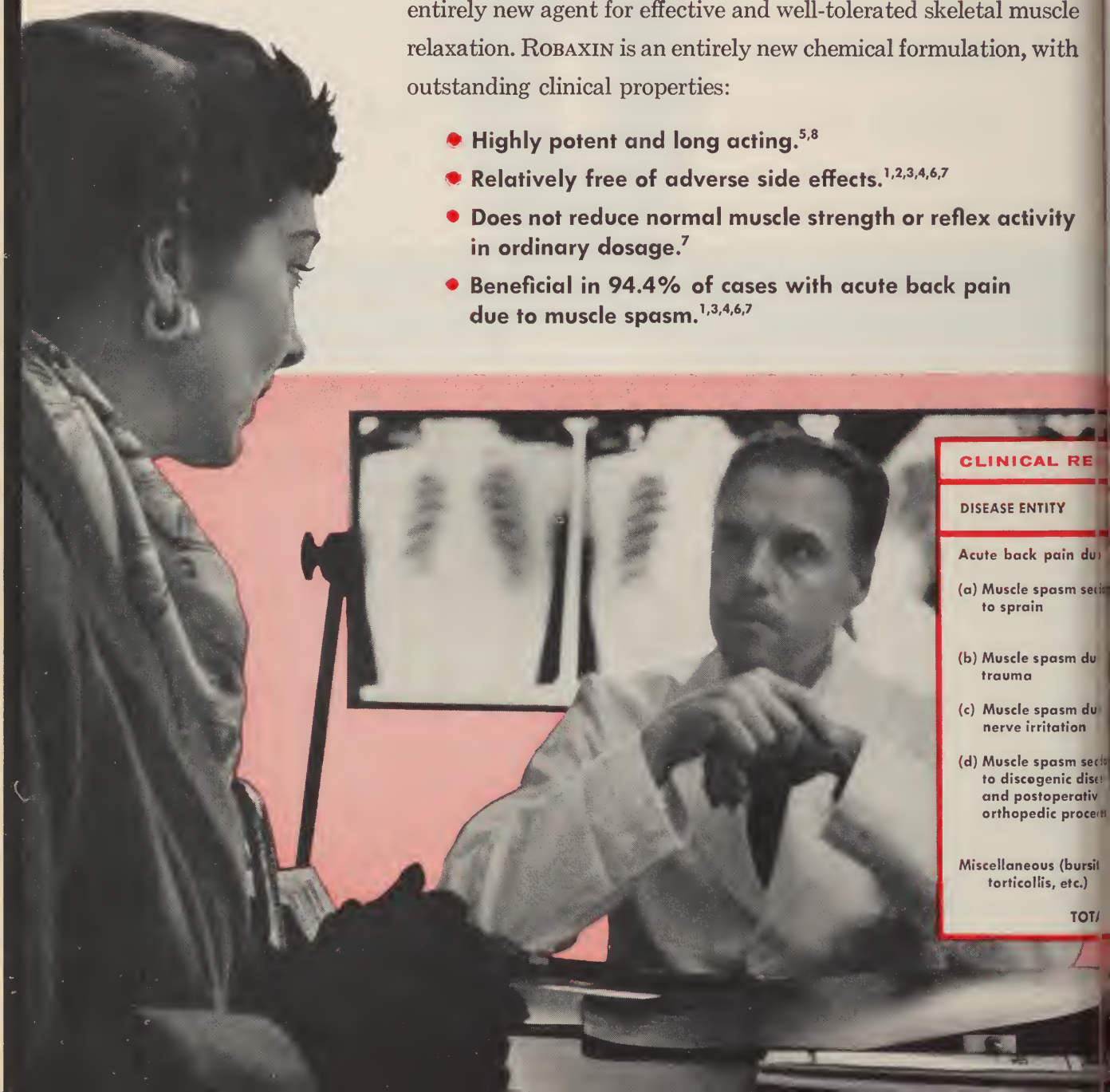
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CLINICAL RE

DISEASE ENTITY
Acute back pain du
(a) Muscle spasm sec to sprain
(b) Muscle spasm du trauma
(c) Muscle spasm du nerve irritation
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ROBAXIN is highly specific in its action on the internuncial neurons of the spinal cord – with inherently sustained repression of multisynaptic reflexes, but with no demonstrable effect on monosynaptic reflexes. It thus is useful in the control of skeletal muscle spasm, tremor and other manifestations of hyperactivity, as well as the pain incident to spasm, without impairing strength or normal neuromuscular function.

Beneficial in 94.4% of cases tested

When tested in 72 patients with acute back pain involving muscle spasm, ROBAXIN induced marked relief in 59, moderate relief in 6, and slight relief in 3 – or an over-all beneficial effect in 94.4%.[1,3,4,6,7] No side effects occurred in 64 of the patients, and only slight side effects in 8. In studies of 129 patients, moderate or negligible side effects occurred in only 6.2%.[1,2,3,4,6,7]

ROBAXIN IN ACUTE BACK PAIN[1,3,4,6,7]

DURATION OF TREATMENT	DOSE PER DAY (divided)	RESPONSE marked	mod.	slight	neg.	SIDE EFFECTS
2-42 days	3-6 Gm.	17	1	0	0	None, 16 Dizziness, 1 Slight nausea, 1
1-42 days	2-6 Gm.	8	1	3	1	None, 12 Nervousness, 1
4-240 days	2.25-6 Gm.	4	1	0	0	None, 5
2-28 days	1.5-9 Gm.	24	3	0	3	None, 25 Dizziness, 1 Lightheadedness, 2 Nausea, 2 *
3-60 days	4-8 Gm.	6	0	0	0	None, 6
		59	6	3	4	*Relieved on reduction of dose

References: 1. Carpenter, E. B.: Publication pending. 2. Carter, C. H.: Personal communication. 3. Forsyth, H. F.: Publication pending. 4. Freund, J.: Personal communication. 5. Morgan, A. M., Truitt, E. B., Jr., and Little, J. M.: American Pharm. Assn. 46:374, 1957. 6. Nachman, H. M.: Personal communication. 7. O'Doherty, D.: Publication pending. 8. Truitt, E. B., Jr., and Little, J. M.: J. Pharm. & Exper. Therap. 119:161, 1957.

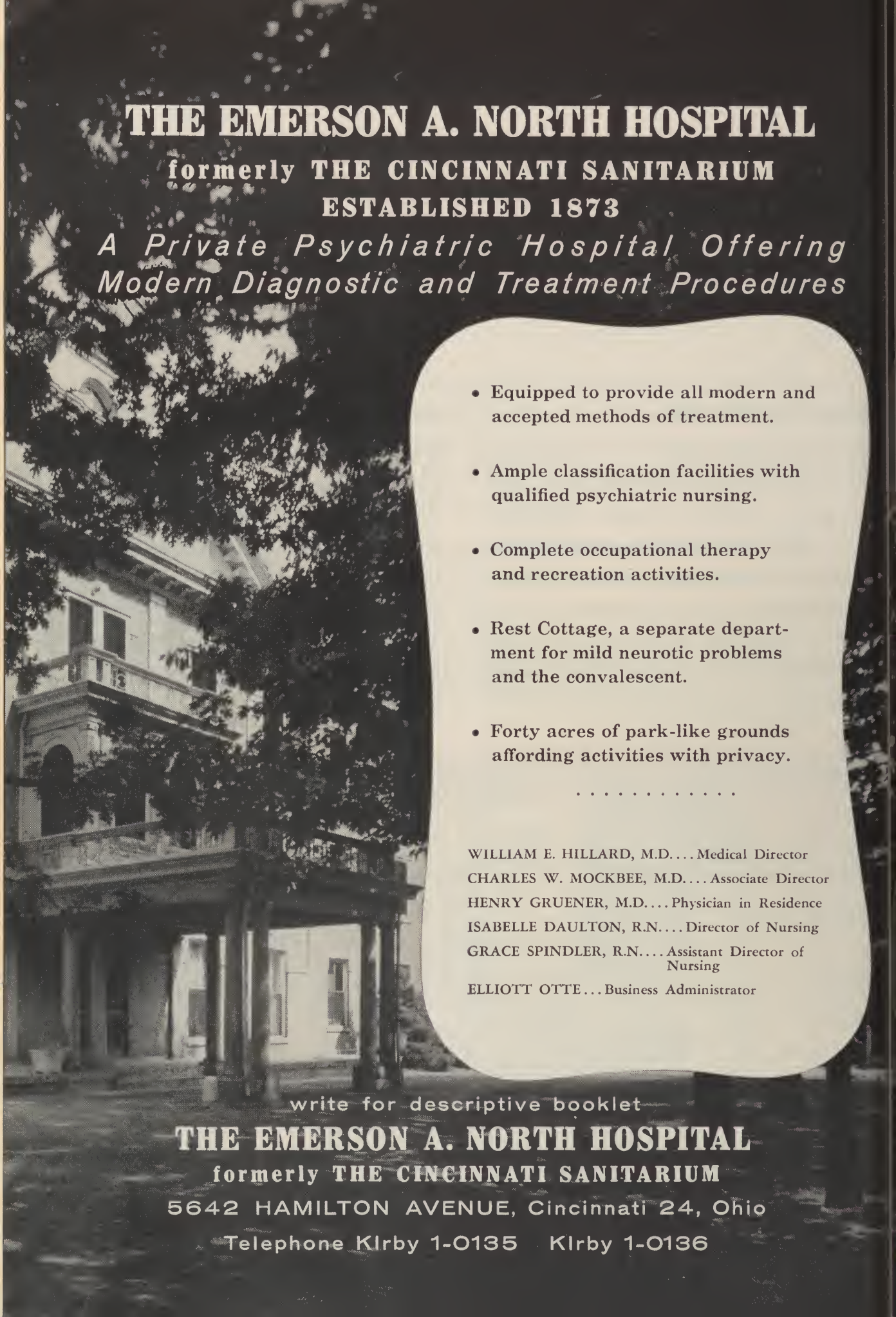
Indications – Acute back pain associated with: (a) muscle spasm secondary to sprain; (b) muscle spasm due to trauma; (c) muscle spasm due to nerve irritation; (d) muscle spasm secondary to discogenic disease and postoperative orthopedic procedures; and miscellaneous conditions, such as bursitis, fibrositis, torticollis, etc.

Dosage – Adults: Two tablets 4 times daily to 3 tablets every 4 hours. Total daily dosage: 4 to 9 Gm. in divided doses.

Precautions – There are no specific contraindications to Robaxin and untoward reactions are not to be anticipated. Minor side effects such as lightheadedness, dizziness, nausea may occur rarely in patients with unusual sensitivity to drugs, but disappear on reduction of dosage. When therapy is prolonged routine white blood cell counts should be made since some decrease was noted in 3 patients out of a group of 72 who had received the drug for periods of 30 days or longer.

Supply – Robaxin Tablets, 0.5 Gm., in bottles of 50.

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Available on prescription only.

TABLETS *(Sugar-coated)*
Each tablet contains:

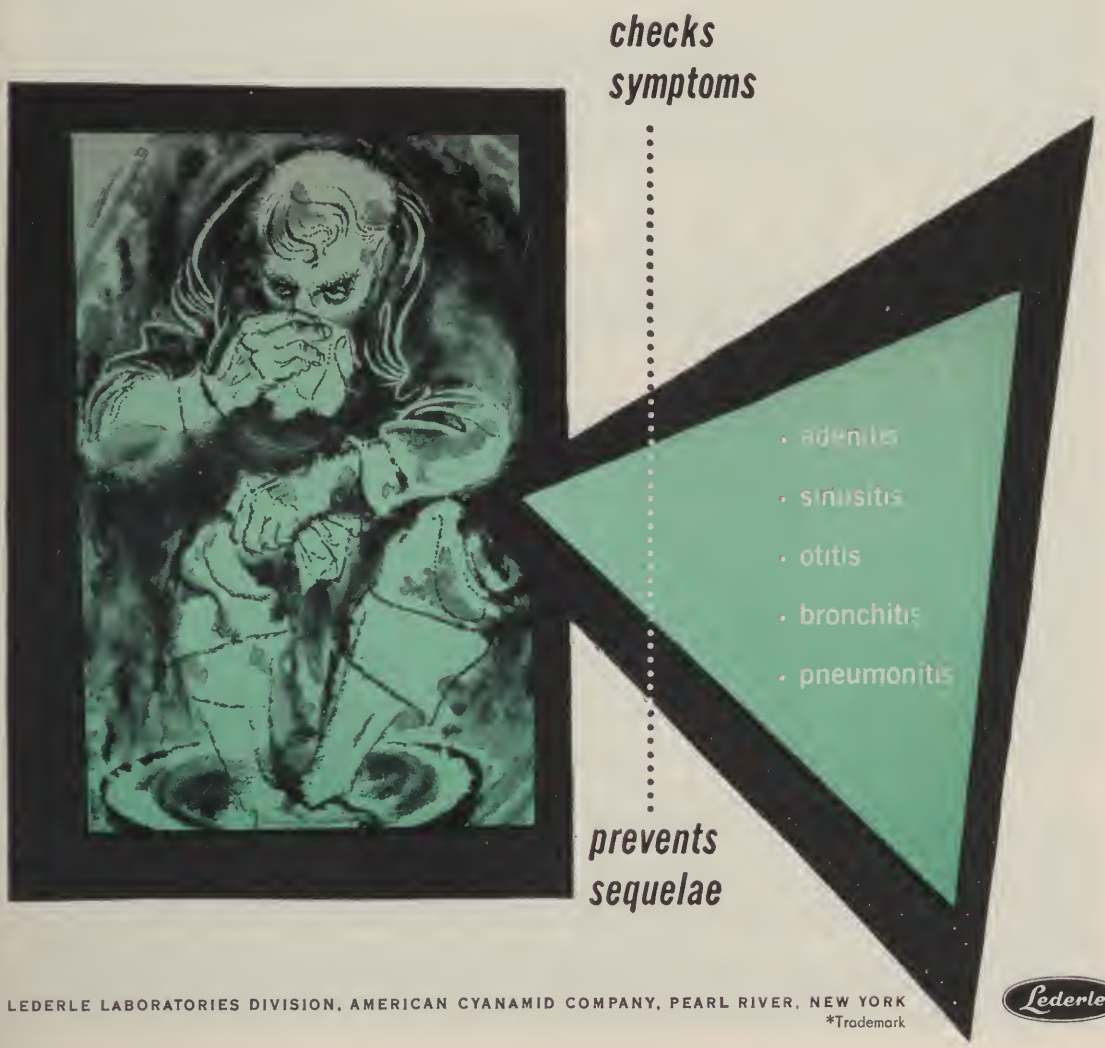
ACHROMYCIN® Tetracycline	125 mg.
Phenacetin	120 mg.
Caffeine	30 mg.
Salicylamide	150 mg.
Chlorothen Citrate	25 mg.

Bottles of 24 and 100

SYRUP *(Lemon-lime flavored)*
Each teaspoonful (5 cc.) contains:

ACHROMYCIN® Tetracycline equivalent to tetracycline HCl	125 mg.
Phenacetin	120 mg.
Salicylamide	150 mg.
Ascorbic Acid (C)	25 mg.
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Methylparaben	4 mg.
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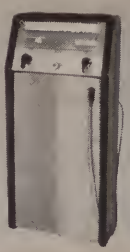
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* J.A.M.A. *166*:158,1958; Welsh, A.L. and Ede, M. *"...prompt remissions of...acute phases."* with TARCORTIN

* 1. Clyman, S. G.: Postgrad. Med. *21*:309, 1957.
2. Bleiberg, J.: J. M. Soc. New Jersey *53*:37, 1956.
3. Abrams, B. P., and Shaw, C.: Clin. Med. *3*:839, 1956.
4. Welsh, A. L., and Ede, M.: Ohio State M. J. *50*:837, 1954.
5. Bleiberg, J.: Am. Practitioner *8*:1404, 1957.

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...from pain of muscle and joint origin, simple headache, neuralgia, and the symptoms of the common cold.

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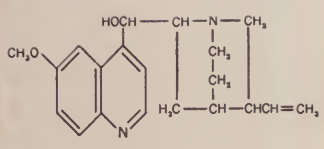
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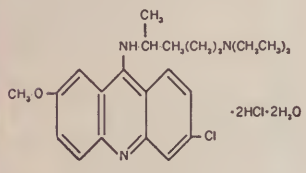
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". . . the least toxic of its class . . ."[3]

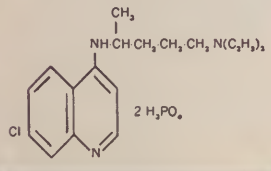
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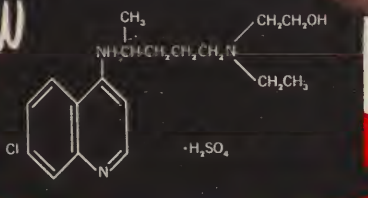
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Maintenance – 200 to 400 mg. (1 or 2 tablets) daily.

SUPPLIED: Tablets of 200 mg., bottles of 100.

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REFERENCES:

1. Herbel, A.L., Schuchter, S.L., and Harrison, J.W.: *Cleveland Clin. Quart.* 24:98, Apr., 1957.
2. Editorial: *Bull A. Mil. Dermatologists*, The Shock Section 5:25, Nov., 1956.
3. Knobleet, Theodore: Arch. Dermat. 73:572, June, 1956.

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METICORTEN® (prednisone)	0.75 mg.
Acetylsalicylic acid	325 mg.
Aluminum hydroxide	75 mg.
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References: 1. Spies, T. D., et al.: J.A.M.A. 159:645, 1955. 2. Spies, T. D., et al.: Postgrad. Med. 17:1, 1955. 3. Gelli, G., and Della Santa, L.: Minerva Pediat. 7:1456, 1955. 4. Guerra, F.: Fed. Proc. 12:326, 1953. 5. Busse, E. A.: Clin. Med. 2:1105, 1955. 6. Sticker, R. B.: Panel Discussion, Ohio State M. J. 52:1037, 1956.

Acute conditions: Two or three tablets four times daily. After desired response is obtained, gradually reduce daily dosage and then discontinue.

Subacute or chronic conditions: Initially as above. When satisfactory control is obtained, gradually reduce the daily dosage to minimum effective maintenance level. For best results administer after meals and at bedtime.

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Alcohol	8%

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Whether the eventual solution of the problem of atherogenesis will come out of the field of dietetics, biophysics, or pharmacology, one fact remains undeniable:

Adequate protein nutrition is considered of importance for the age group most commonly affected by disease of the vascular system, so that the demands of good nutritional health might be met.

Meat is outstanding among protein foods. It supplies all the essential amino acids, and closely approaches the quantitative proportions needed for biosynthesis of human tissue.

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The nutritional statements made in this advertisement have been reviewed by the Council on Foods and Nutrition of the American Medical Association and found consistent with current authoritative medical opinion.

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- those on corticoids
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the best broad-spectrum antibiotic to use is

MYSTECLIN-V

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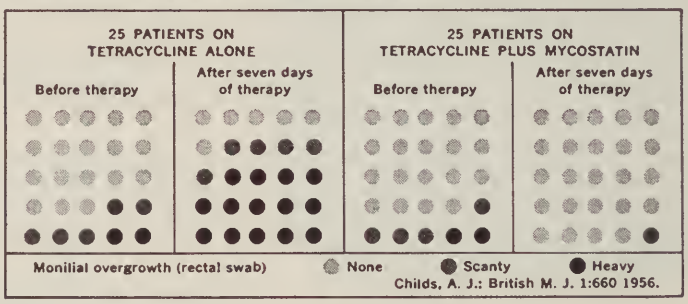
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MYSTECLIN-V PREVENTS MONILIAL OVERGROWTH



Childs, A. J.: British M. J. 1:660 1956.

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"MYSTECLIN," "MYCOSTATIN," AND "SUMYCIN" ARE SQUIBB TRADEMARKS

for simultaneously combating inflammation, allergy, infection

METIMYD® ophthalmic suspension
(0.5% prednisolone acetate and 10% sulfacetamide sodium—5 cc. dropper bottle)

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in external eye disorders look to these topical healing aids



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METRETON® ophthalmic suspension
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standard for ocular infections

Sodium SULAMYD® ophthalmic solution 30%
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The non-narcotic analgesic with the potency of codeine

DARVON (Dextro Propoxyphene Hydrochloride, Lilly) is equally as potent as codeine yet is much better tolerated. Side-effects, such as nausea or constipation, are minimal. You will find 'Darvon' helpful in any condition associated with pain. The usual adult dose is 32 mg. every four hours or 65 mg. every six hours as needed. Available in 32 and 65-mg. pulvules.

DARVON COMPOUND (Dextro Propoxyphene and Acetylsalicylic Acid Compound, Lilly) combines the antipyretic and anti-inflammatory benefits of 'A.S.A. Compound'* with the analgesic properties of 'Darvon.' Thus, it is useful in relieving pain associated with recurrent or chronic disease, such as neuralgia, neuritis, or arthritis, as well as acute pain of traumatic origin. The usual adult dose is 1 or 2 pulvules every six hours as needed.

Each Pulvule 'Darvon Compound' provides:

'Darvon'	*32 mg.*
Acetophenetidin	*162 mg.*
'A.S.A.' (Acetylsalicylic Acid, Lilly)	*227 mg.*
Caffeine	*32.4 mg.*

*'A.S.A. Compound' (Acetylsalicylic Acid and Acetophenetidin Compound, Lilly)

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The JOURNAL of the
Kentucky State Medical Association

ISSUED MONTHLY UNDER THE DIRECTION OF THE COUNCIL

VOL. 56 MARCH, 1958 NO. 3

Complications of Hypoglycemia*

ROBERT S. TILLETT, M.D., A.A.C.P.
AND JOHN S. LLEWELLYN, M.D., F.A.C.P.
Louisville, Ky.

THE causes of hypoglycemia are many and the complications are varied. It is our purpose to review some of the complications of hypoglycemia and the pathological-physiology of the condition. Modes of therapy, both established and experimental will be mentioned and brief case reports will be presented.

Causes of Hypoglycemia

Aside from "functional hypoglycemia," the most common causes of hypoglycemia are hypersecretion of insulin by the pancreas and the injection of large amounts of insulin therapeutically or accidentally. Hepatic diseases with extensive parenchymatious involvement render hepatic glycogen stores deficient. Conditions such as acute yellow atrophy, cirrhosis, hepatitis and poisoning from certain chemicals may result in severe and possibly fatal hypoglycemia. In glycogen storage (von Gierke's) disease, glycogen though abundantly present is unavailable so that blood glucose levels may be low. Loss of glucose through renal glycosuria seldom if ever leads to serious blood glucose depletion. Severe hypoglycemia may accompany Simmonds or Addisons disease. Disorders of the central nervous system are rare causes of hypoglycemia but include encephalitis and lesions in the basal ganglia.

Hypoglycemia in the neonatal period is normal. At birth, the infant rapidly exhausts glycogen which is not replaced for four or five days when feeding is sufficient. Blood sugar levels are gradually restored to normal over a period of about two weeks. Absence of symptoms in the newborn is due to the low metabolism of the brain in the neonatal period, which permits continued function of the brain under hypoglycemic conditions not tolerated by adults. Hypoglycemia neonatorum is not due to hyperfunction of the beta cells at birth and is not more frequent or more severe in infants of diabetic mothers than in infants of normal individuals.[1]

"Familial hypoglycemia" has recently been described in three separate families. Two siblings in one family with absence of pancreatic islet alpha cells (source of hyperglycemic-glycogenolytic factor or glucagon) had hypoglycemia due to decreased glycogenolysis.[2, 3] In the other two families there was a familial or hereditary tendency but histologic examination did not provide any clue to the etiology and the alpha cell factor remains to be proved in these cases.[3,7]

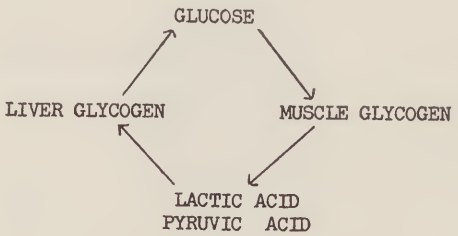
Possible additional causes for hypoglycemia are the oral hypoglycemic agents, tolbutamide (Orinase®) and carbutamide (B-Z 55). Although hypoglycemia occurring as a result of these drugs is usually mild, hypoglycemic complications have been noted.

Relation of The Blood Sugar Level to Hypoglycemic Syndrome

The chief role of blood sugar is the maintenance of normal brain metabolism. All other organs, even heart muscle, can utilize other foodstuffs. Nervous tissue can utilize minute quantities of other foodstuffs (acetoacetic and glutamic acids) but to such a small degree that nervous tissue may be considered completely dependent upon glucose for its metabolism.

The main source of blood sugar is hepatic glycogenolysis. When the blood sugar falls, the secretion of insulin ceases and the hormones of the anterior pituitary and adrenal cortex inhibit

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A. THE GLUCOSE LACTIC ACID CYCLE

$$\text{GLUCOSE} + \text{ATP} \xrightarrow{\text{hexokinase}} \text{GLUCOSE 6 } PO_4 + \text{ADP}$$

B. THE PHOSPHORYLATION OF GLUCOSE

Figure I

glucose utilization by tissues other than the central nervous system, thereby conserving the small amount of glucose in the blood for the brain.

The glucose-lactic acid cycle (Fig. 1A) is a mechanism whereby a hypoglycemic reaction is mitigated, sometimes to the point of the patient regaining contact with the environment after convulsions have occurred. The violent muscular activity of convulsions accelerates the release of lactic acid to the blood. The lactic acid is then absorbed by the partially depleted liver and made available in the form of glucose.[4]

Phosphorylation is fundamental in the metabolism of glucose at the cellular level. Phosphorylation of glucose by adenosintriphosphate occurs under the enzymatic action of hexokinase. (Fig. IB) Interference with any of the three factors necessary for the procession of this reaction could, if prolonged, produce irreversible brain cell damage or death.[4]

Pathological Physiology of Hypoglycemia

As indicated, the adverse effects of a lowered blood sugar level are upon the central nervous system and especially the brain. If this state continues, the results may be disastrous. Himwich's studies on insulin coma patients indicate that the brain functions in five layers. (Fig. II) These are the cortical layer, the sub-cortical-diencephalic, the mesencephalic, the pre-myelencephalic and the myelencephalic or medullary layers, in that order. Brain waves disappear first from the cortical layer but on administration of glucose reappear first in the hypothalamic areas and last in the cortex. Glycogen is depleted from the various cerebral areas in the same phyletic manner, the higher centers of the brain, including the caudate nucleus and the cerebral gray matter, losing glycogen sooner than the lower centers. The spinal cord and medulla retain their glycogen content.[1]

Himwich and later Damashek found a diminished utilization of oxygen during hypoglycemia.[5] The cerebral arteriovenous oxygen difference may decrease to one fourth the original during hypoglycemia.[6] Since cerebral blood flow changes are not of great magnitude, Himwich concluded that the reduced a-v oxygen difference is due to deprivation of the substrate

Stages of Hypoglycemia (after Himwich)

PHASE	AREA	SIGNS AND SYMPTOMS
I	CORTEX	somnolence, impairment of recognition, motor and speech incoordination, wild excitement
II	SUBCORTEX	dilatation of pupils, tachycardia, BP rise, restlessness, primitive movements as sucking, grasping, snarling; twitching, deviation of head and eyes, convulsions
III	MESENCEPHALON	hypertonia, torsion spasms with rotation of head and shoulders and trunk; tonic spasms with flexion of arms and extension of torso and legs
IV	PREMYELENCEPHALON	extensor spasms of arms and legs (decerebrate rigidity)
V	MEYELENCEPHALON	lies quietly with pale skin, shallow respiration, slow pulse, extreme hypotonia; protracted shock and lethal outcome if prolonged

Figure II

Changes in Hypoglycemia

Blood	C N S	Cardiovascular
Potassium ↓	∿ Rhythms ↓	Pulse Pressure ↑
B. U. N. ↓	Ø Rhythms ↑	Minute Volume Output ↑
Adrenalin ↑	Sugar follows but lags behind blood sugar[5]	Cardiac Work ↑
Hemoglobin ↑		
R. B. C. ↑		
Sugar variable "rhythmical rise and fall"[10]		
Citric Acid Content[11] ↑		

Figure III

glucose so that the condition is not a true anoxemia. Hypoglycemia also produces changes in the small capillaries, with the development of by-pass shunts and capillary stasis depriving cells of glucose and oxygen. Subsequent increased capillary permeability leads to "water logging" of the tissues and extravasation of blood and fluids.[1, 4, 7, 8, 9]

Other changes found in hypoglycemia are as outlined in Fig. III. The blood sugar level is variable and some have found a "rhythmical rise and fall" of blood sugar during hypoglycemic coma.[5] Fabrykant[10] noted that the venous blood sugar was higher than the arterial blood sugar level in hypoglycemia. He concluded there was a diffusion of glucose from the tissues into the blood stream in response to the fall of arterial blood sugar. Arterial blood sugar determination may at times be helpful since the venous blood sugar value may be misleadingly high. A rise in citric acid content of the blood after administration of glucose to diabetics with hypoglycemia has been reported and thought by some to be related to convulsions, especially in children.[11] A recent EEG study in rabbits indicates that hypoglycemic seizures arise in and may be confined to the amygdala and hippocampus but may not be accompanied by any apparent somatic activity, being detected only by deep electrodes.[12]

Complications of Hypoglycemia

Some of the complications of hypoglycemia are as follows:

I. Encephalopathy
  A. Protracted coma—due to:
    a. insulinoma (pancreatic tumor)
    b. hyperinsulinism in diabetes
    c. hyperinsulinism in coma therapy
    d. oral hypoglycemic agents (?)
  B. Repeated hypoglycemic episodes
II. Neuropathy
  A. muscular atrophy
  B. paresthesiae
III. "Pseudopsychosis"
IV. "Insulin paradox in diabetes"
V. Cardiovascular complications

Protracted Coma

When a patient remains in hypoglycemia coma for prolonged periods the intravenous administration of glucose may not rapidly restore consciousness. In this case, rapid pulse, Cheyne-Stokes breathing and protracted coma ensue, lasting for variable periods from hours to weeks or months or death may occur. It is likely that enzyme systems such as the phosphorylation mechanism are damaged when irreversible brain damage occurs. A progressive depression of oxygen saturation of arterial blood also occurs and it is probable that anoxemia is partly responsible for the cerebral damage. Animal experiments have indicated also a possible direct toxic effect of insulin on the enzyme systems when insulin is present in unphysiologic amounts.[13]

When hypoglycemic coma proves irreversible, permanent results of encephalopathy may be hemiparesis, ataxia, incontinence, aphasia, choreiform movements, Parkinsonism, epilepsy, mental deterioration or idiocy.[13] Autopsy examinations have shown that neurones of the frontal, temporal and occipital lobes sustain the heaviest damage. Reactive glial prolifera-

Protracted Coma

CASE	INSULIN DOSE DAY COMA PROLONGED	TREATMENT	BLOOD SUGAR	OUTCOME
I 47, F	180	glucose, oxygen, ACTH, hydrocortisone, potassium, calcium, blood, phenobarbital	15	permanent brain damage and coma
II 32, F	400	glucose, calcium, blood, cortisone	normal (after glucose)	gradually improved after 24 days
III 42, F	200	glucose, calcium, blood, cortisone, potassium	67	coma 36 hours, recovery save for anosmia
IV 28, F	400	glucose orally and intravenously	. .	coma 4 hrs. no sequellae
V 26, F	800	glucose orally and intravenously	. .	recovery — subsequent coma therapy without incident

Figure IV

tion, perivascular exudations, neoformation of blood vessels and vascular thromboses are prevalent. The brain is edematous, the meninges congested and there are petechial hemorrhages of the cortex with possible extravasation of blood into the subarachnoid space. The basal ganglia show some changes but the mid-brain and medulla little or none.[14]

The severity of these changes bears little relation to the dose of insulin or the number of convulsions, a moderate degree of hypoglycemia unduly prolonged having as great, if not greater, adverse effects as a larger dose of insulin acting a correspondingly short time.[5] It is also known that patients may develop protracted coma following a dose of insulin in the amount which was previously well tolerated. A possible explanation is that the level of adrenal cortical steroids rises in the blood with each succeeding treatment, then may suddenly drop off precipitously. The protracted coma may occur on the day that the cortical steroid level suddenly drops.[15]

Examples of Protracted Coma

Several cases of protracted coma occurring in psychiatric patients are examples of this type complication: (See Fig. IV)

Case I. This 47-year-old female had a paranoid schizophrenic reaction. Insulin therapy was started with 40 units and increased gradually to 180 units. On the ninth treatment coma required repeated intravenous infusions of concentrated glucose solution. Her blood sugar was 15 mgm. Blood transfusions, hydrocortisone intravenously, potassium, calcium, phenobarbital, caffeine sodium benzoate, ACTH and oxygen failed to terminate the coma but her blood sugar rose to 167 and 178 mgm. She had intermittent extensor spasms and bilateral Babinski responses. Evidence of widespread brain damage persisted and after 12 months she continued a vegetative existence.

CASE II. This patient was a 32-year-old schizophrenic six months postpartum. Previous insulin coma therapy with 500 units daily had been given without incident. The following day she received 400 units and coma ensued without response to oral or intravenous glucose. Additional glucose, blood plasma, calcium and cortisone were given. Examination revealed decerebrate rigidity. Occasional convulsions occurred. On the 24th post-coma day she opened her eyes when spoken to but remained out of contact and incontinent and required tube feeding. All blood sugar determinations were normal although these were done only following the administration of intravenous glucose. The cerebrospinal fluid was normal. She was transferred one month later to a state hospital unimproved but subsequently made a slow and relatively good recovery.

The above two cases represent the more serious complications of hypoglycemia.

Case III. A 42-year-old schizophrenic patient was treated with insulin coma, the dosage being gradually increased to 200 units. On the fourth day of 200 unit dosage she developed

coma lasting about 36 hours. Her pupils dilated, and sucking movements and bilateral Babinski were present. She did not respond to glucose, blood transfusion and potassium. The blood sugar done five hours later was 67 mgm. After 36 hours she slowly resumed activity and became alert and responsive. Symptoms of pre-coma anxiety were absent. The only residual was a persistent anosmia.

Case IV. A 28-year-old paranoid schizophrenic was started on 40 units of insulin which was gradually increased to 400 units. On the ninth day of the 400 unit dose she developed protracted coma lasting four hours following which she gradually improved. No sequelae were noted.

Case V. A 26-year-old schizophrenic, simple type, was started on 40 units of insulin which was gradually increased to 800 units daily. At the 800 unit level she relapsed into coma following intravenous glucose. Clonic spasms then appeared and lasted two to three hours. She then became more alert but for the next 24 hours repeatedly lapsed into coma despite repeated intravenous glucose infusions. Treatment was omitted the following day but then was resumed on a lower dosage, ranging from 200 to 150 units, without further untoward incident.

Repeated Hypoglycemia

In diabetic patients and especially in juvenile diabetics, repeated hypoglycemic episodes over a relatively long period of time may result in post-hypoglycemic encephalopathy even though no protracted coma has occurred. Gardner and Ryersbach[16] point out that temporary or permanent cerebral damage may occur from hypoglycemia produced by insulin doses well within therapeutic range. Their patient, an eight-year-old diabetic, developed mental deterioration and EEG changes following two hypoglycemic convulsions and died at age twelve of hypoglycemic brain damage. Also, in idiopathic hypoglycemosis in infants who are not treated, mental retardation and permanent cerebral damage occurs.[37]

Others[17] have commented on the occurrence of encephalopathy in patients having frequent alternating episodes of ketosis and insulin shocks. However, some of the attacks resembling hypoglycemia occurred with normal or elevated blood sugar levels. Joslin has termed these, "false hypoglycemic reactions." Fabrykant suggests that the "reaction threshold" may be lowered by repeated hypoglycemic reactions resulting in cumulative brain damage so that "reactions" may occur in the face of blood sugar levels of 200 or 300 mgm. A high incidence of abnormal electroencephalograms in diabetic patients has been noted, but experience and statistics do not bear out a high incidence of true epilepsy in diabetics. That many of the abnormal EEG's are due to actual hypoglycemic brain damage cannot be ruled out.

In hypoglycemia produced by an overdose of protamine-zinc insulin, symptoms may be absent for hours and fatal convulsions from brain damage may occur after the blood sugar has been raised by glucose to normal or above. In animal experiments, Fabrykant and Bruger made dogs hypoglycemic twenty to forty hours with protamine-zinc insulin with a fall of the blood sugar to 20 to 30 mgm. Elevation of the blood sugar to normal by administering glucose resulted in death of the animals and autopsy revealed large numbers of petechial hemorrhages in the brain.[18]

Oral Hypoglycemic Agents

It is possible that the oral hypoglycemic agents may induce hypoglycemia severe enough or prolonged enough to result in cerebral damage.

Case VI. A 67-year-old diabetic and hypertensive patient was placed on carbutamide (B-Z 55). Her initial blood sugar was 375, her BP 190/90. On maintenance carbutamide therapy, her fasting blood sugar was 190 and the post prandial 185 in the hospital. Eight days after discharge from the hospital she had several episodes of semi-syncope with pallor and sweating which suggested hypoglycemic crises. Some of these were associated with jerking movements of her left face and extremities. Subsequently, she became confused, vomited and complained of headache. She then had a mild right sided hemiparesis and a right Babinski response. Following admission to the hospital she continued to have clonic movements of her left face and extremities. The cerebral spinal fluid was heavily blood tinged and the lumbar pressure normal. A blood sugar determination done following admission was 87 mgm.

It seemed that this patient had a spontaneous subarachnoid hemorrhage but in view of the convulsive phenomena it was thought that there may have been cortical and subcortical hemor-

rhages and that these may have developed during a hypoglycemic episode. It was felt unwise to carry out further investigations to establish the possible presence of vascular anomalies. This patient made a relatively complete recovery and her diabetes is well controlled on diet and a small daily dose of Lente® insulin.

The occurrence of temporary or permanent cerebral damage and progressive mental deterioration in long standing cases of patients with hyper-functioning tumors of the islets of Langerhans is well documented.[19] The importance of early operation of these cases once the diagnosis is established is apparent.

Neuronopathy

Instances of chronic hypoglycemia, such as may occur in functioning islet cell tumors, causing damage to the anterior horn cells of the spinal cord have been reported. Milder, Bastron and Lambert[20] cited twelve patients, including two of their own, with muscular atrophy secondary to hyperinsulinism. In these patients, distal muscular atrophy or paresthesias or both occurred following severe and prolonged hypoglycemia. Sensory impairment is infrequent except for decreased vibratory sense or two-point discrimination and late stocking-glove anesthesia. Muscle fasciculations were present in some. Transitory paresthesias are reported to be common following insulin coma therapy and following insulin over-dosage in diabetics.[21]

The pathological basis of these cases is not certain. The muscular atrophy cases may be due to damage to the anterior horn cells, for which there is pathological evidence.[22] There is no evidence that vascular alterations or vitamin deficiency are contributory.

Pseudopsychosis

Among the complications of hypoglycemia, Lortie and Laird[23] have reported a case of "pseudopsychosis." This patient demonstrated most of the usual findings of catatonic schizophrenia and received such a diagnosis until the hypoglycemic etiology of the condition was discovered. This patient was cured by surgical removal of a pancreatic adenoma.

Insulin Paradox

McKean[24] observed a diabetic patient in whom there was a paradoxical rise in the blood sugar level and glycosuria from chronic insulin overdosage. In this condition, excessive insulin dosage, usually protamine zinc insulin, resulted in nocturnal hypoglycemic reactions which remained unrecognized by patient and physician. Blood sugar determinations done before breakfast revealed hyperglycemia. Only when a spontaneous vertebral compression was discovered and blood sugar determinations were done "around the clock," was the nocturnal hypoglycemia diagnosed, and thus further increases in insulin dosage avoided. Hypothetically, in this condition, the episode of hypoglycemia causes stimulation of epinephrine, thus liver glycogen is mobilized, leading to spontaneous post-hypoglycemic hyperglycemia. The more intermediate acting insulins such as NPH seem to be most helpful in the management of the "insulin paradox."

Cardiovascular Complications

Some of the earliest observations of the adverse effects of hypoglycemia on the cardiovascular system were made by Ernstene and Altschule in 1933.[25] These investigators detected cases of myocardial infarction, myocardial failure and angina pectoris among diabetics following insulin injections. They also studied the minute volume output of the heart in hypoglycemia and found it increased, sometimes markedly, along with an increase in pulse pressure and pulse rate. In other words, there is a considerable increase in cardiac work which may be poorly tolerated in subjects with myocardial insufficiency or angina. Other abnormalities during or precipitated by hypoglycemia include S-T and T wave changes in the electrocardiogram and various arrhythmias including premature beats, paroxysmal auricular tachycardia or fibrillation and hypersensitive carotid sinus.[26, 27, 28]

It is apparent that hypoglycemia is to be avoided in patients with arteriosclerosis, angina pectoris or cardiovascular insufficiency, especially when ketosis is present. Potassium depletion which occurs in ketosis or in hypoglycemia compounds the deleterious effects of hypoglycemia on the cardiovascular system.

Treatment of Hypoglycemia

In functional hypoglycemia dietary measures may help and in functioning islet cell tumors partial pancreatectomy may effect a cure. The occasional possibility of self injection of insulin by a patient who is psychiatrically disturbed should not be overlooked.[29] Among newborns who display hypoglycemic symptoms during the early weeks of life, and absence of alpha cells seems likely, therapy using ACTH may

be curative.

In cases of protracted hypoglycemic coma, glucose orally and intravenously Adrenalin®, adrenal-cortical steroids and ACTH may be of value. Oxygen and support of the cardiovascular system by blood transfusions are sometimes indicated. Vitamin B-1, nicotinic acid, riboflavin and calcium may be tried but are of questionable value. Potassium is decreased in brain and blood during hypoglycemia and potassium administration stimulates cerebral oxidation. Whether early administration of potassium can prevent irreversible brain damage is open to question.

Novaldin®, a mild analgesic, has been suggested since it is believed to render the brain more permeable to glucose. Likewise, the administration of Amytal® or barbital to patients with protracted coma apparently is quite safe and has been suggested on the basis that these drugs depress cerebral metabolism so that the glucose and oxygen requirements of the brain are lowered.

Even the administration of glucose in protracted coma is entirely empirical. Himwich[1] has advised giving sufficient glucose to raise the blood sugar to 500 mgm. or more. Yet, once irreversible changes have taken place in the brain, it is unlikely that any amount of glucose in the blood is going to pass the blood-brain barrier or be utilized by the damaged nervous tissues.

The amount of glucose which must be given to overcome hypoglycemic coma has not been determined. German workers have concluded that the blood sugar level must be raised to a minimum of 45 mgm. per cent.[30] When glucose is administered by mouth, a large portion is phosphorylated by the intestinal mucosa and this accelerates subsequent utilization of glucose by the tissues.[31] Sucrose and glutamic acid have been investigated for their "glucose sparing action" but neither has been found satisfactory for treating coma.[32, 33]

Glucagon

Recently glucagon has received some attention in the treatment of hypoglycemic coma. Glucagon is a naturally occurring hormone of the pancreas apparently produced by alpha cells of the islets of Langerhans. The recent investigative work has indicated that glucagon has a dual role in carbohydrate metabolism, both mobilizing liver glycogen and enhancing peripheral utilization of glucose. In combination with insulin in the body it can maintain a greater constancy of blood sugar level and liver glycogen content than can either hormone alone. Glucagon is therefore not a true "insulin antagonist" but hyperglycemia and glycosuria have been observed following its administration.[34] Schulman and Greben[35] have recently employed glucagon to terminate insulin coma in schizophrenic patients. The insulin dosage in eleven patients in their series varied from 60 to 2,000 units with an average of 593 units. One hundred forty-one doses of glucagon ranging from 0.003 to 0.3 mgm. per Kg. of body weight administered intravenously, intramuscularly or subcutaneously. The authors concluded that glucagon is a satisfactory drug for the routine termination of insulin coma given intravenously.[35] It may well prove to be a useful adjunct to the treatment of protracted coma.

However, since it is assumed that prolonged coma is essentially due to a breakdown of carbohydrate metabolism and at the present time it is not known exactly at what point this breakdown occurs, it is not likely that a specific treatment for prolonged coma will be found until such knowledge is forthcoming from the investigators in the field.

Conclusions

An attempt has been made to review some of the complications of hypoglycemia and to correlate this with certain clinical implications regarding therapy. Since hypoglycemia is not infrequently encountered clinically in the fields of general medicine, surgery, psychiatry and pediatrics, future investigation in this field should be anticipated widely.

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Modern Concepts In The Management Of Hepatic Failure*

John M. Rumball, M.D.**

Coral Gables, Florida

Introduction

EMIL Fisher, the famous German chemist, once referred to the liver as the "pantry of the body." He no doubt meant a biochemical "pantry" for I know of no better description. There are many sections of this pantry that have yet to be explored, though in the past few years some of our knowledge of the workings of the liver has been uncovered.

It is difficult to determine where mere liver injury ends and hepatic failure begins. The presence of abdominal ascites associated with acute or chronic liver disease certainly denotes hepatic failure, yet hepatic failure may occur without ascites. Hepatic failure may be defined as the result of metabolic alterations that are primarily manifested by lethargy or coma and other neurological changes—in other words, a "metabolic encephalopathy." Jaundice, ascites and/or fetor hepaticus may or may not be part of the picture. Sheila Sherlock[1] has classified or graded hepatic failure in accordance with the neurological status:

Grade 1—Minor disorders of consciousness and the motor system.

Grade 2—Gross disorders of consciousness with disorientation in time and space.

Grade 3—Coma.

A simpler classification would be (1) impending coma; (2) coma.

Pathogenesis

The pathogenesis of hepatic failure involves a number of metabolic abnormalities. The exact relationship to actual coma is still not understood. Investigations have been concerned with the role of pyruvate, lactic acid, and glucose as abnormalities of carbohydrate metabolism. Abnormalities of protein metabolism involve most of the amino acids but research has centered about glutamic acid and arginine and their relationship to the release of ammonia. The liver normally converts ammonia to urea. In many instances, but not all, of severe liver injury, ammonia does not become converted and it has been theorized that ammonia is a factor in the metabolic encephalopathy. Historically it is of interest to recall that in 1893 Hahn[2] while working in Pavlov's laboratory first described "meat intoxication" in dogs with an Eck fistula (portacaval shunt). Forty-two years later (1934) Monguio[3] demonstrated that "meat intoxication" was associated with an elevated blood ammonia. Twenty years later (1954) McDermott and Adams[4] showed that

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**Chief, Medical Service, Veterans Administration Hospital, Coral Gables, Florida.

From the Medical Service, Veterans Administration Hospital, Coral Gables, Florida.

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in a produced Eck fistula coma could be precipitated by a high protein diet or by the use of ammonium salts and the process could be reversed by decreasing the protein intake or by discontinuing the ammonia salt.

Diagnosis

The diagnosis of impending coma or hepatic coma usually is not difficult. The major signs and symptoms are neurological. The first and perhaps the earliest is the slowing of the mental processes followed by frank drowsiness and lethargy. The daily urinary output may diminish. A characteristic flapping, coarse tremor of the hands and at times the feet is frequently observed when the extremity is extended for a minute or so. These signs, when associated with evidence of liver disease, should lead one to the proper diagnosis. There is no specific laboratory test that is diagnostic of hepatic coma. There is usually a lowering of all the major electrolytes. Acidosis may be present. The urea nitrogen may be low but terminally will rise. The electroencephalogram may show abnormal bursts of slow waves, particularly over the frontal area. The prothrombin time may be increased above 25 seconds.

Precipitating Factors

In order to properly treat patients with liver disease, we must understand and avoid any treatment or procedure that might precipitate coma of hepatic origin. These precipitating factors are:

1. A worsening of the underlying hepatic disease. This may occur in spite of any attempt to curtail the process. A chronic active process may continue, due to viral hepatitis or Laennec's cirrhosis. Repeated exposure to carbon tetrachloride may cause an increase of liver injury.

2. Inadequate nutrition during the immediate period of hepatic injury and of attempted repair.

3. Intercurrent infection in an individual with chronic liver disease may aggravate the process and precipitate coma.

4. Any procedure in which shock is possible may suddenly produce impending coma or coma. Elective surgical procedures should be avoided if possible.

5. The inadvertent use of narcotics in patients in impending coma may initiate coma. The use of barbiturates has not been shown to influence liver injury or precipitate coma.

6. Blood loss by bleeding from peptic ulcer or ruptured varices in patients with liver injury not only may induce impending coma or coma by the effects of the actual blood loss, but the absorption of the nitrogenous substances from blood in the gastrointestinal tract will make the condition worse.

7. Iatrogenic factors frequently result from good intentions. The over-zealous physician may precipitate coma by (a) an abdominal paracentesis when it should not be done; (b) by over-hydration; (c) by use of a high protein intake in patients with chronic liver disease and for those in impending coma.

General Principles of Treatment

The clinical judgment of the physician will play a large role in the intensity of the treatment. An understanding of our present concepts of pathogenesis is the basis for treatment. The use of this knowledge enhances the clinical judgment.

1. Withdrawal of precipitating factors is, of course, an all inclusive principle. It entails the diet, stopping of hemorrhage if present, correction of anemia if present, washing nitrogenous substances from the gastrointestinal tract, and avoiding trauma, infection, and the use of narcotics.

2. Meticulous correction of electrolytic disturbances. Not infrequently, early in hepatic coma, there is a respiratory alkalosis. The use of oxygen inhalation with 5-10% CO_2 will help decrease the high plasma CO_2. Later in hepatic coma there frequently develops an acidosis and the PCO_2 is lower than normal.

3. Attempts to decrease blood ammonia. The knowledge of the level of the blood ammonia no doubt is helpful. I have never followed a patient of whom I had this knowledge, and I doubt that a few have, or will be able to in the near future. The fact that it is helpful to reduce ammonia formation is undisputed. The following has been found beneficial:

a. Diet—all protein is stopped and added only when all evidence of impending coma has disappeared. When protein is added to the diet it is added in small amounts, at first using 20 grams of protein a day for several days to see if this will be tolerated then adding another 20 grams for a week or more, and finally, if no ill effect results, a full 70-80 grams of protein a day may be prescribed. No harmful effect has been seen in keeping a cirrhotic in negative nitrogen balance over a period of several months.

b. The endogenous formation of ammonia in the colon can be prevented by the use of antibiotics. I have preferred Neomycin in dosage of 0.5 gm. q.i.d.; however, tetracycline may be used. These antibiotics will destroy the ammonia-splitting organisms in the colon.

c. If hemorrhage has occurred, the use of a cathartic is advisable to remove all old blood from the intestinal tract. The nitrogenous substance from blood then cannot be absorbed.

d. The use of such amino acids as glutamic acid and/or arginine have had their proponents and foes during the past few years. Glutamic acid is given in the form of sodium glutamate in doses of 60 gms. per liter of 5% dextrose. Walshe[5] in England and a few investigators in this country feel that it is beneficial in a large enough number of individuals to warrant its use. So far in my own experience it has not proven effective. L-Arginine[6] has been advocated during the past two to three years. There are some who are convinced of its value, others are not. The general principle invoved in the use of this amino acid is to release ammonia by the action in the complex Krebs cycle. There is some promise that L-Arginine may be more effective though the use of either one must be considered experimental at this stage.

4. A high carbohydrate intake of at least 1600 calories should be supplied daily. This can be given as glucose drinks, by intragastric drip through a Levine tube, or intravenously. Concentrated intravenous glucose often thromboses small veins; therefore, if necessary, a polyethene tube can be introduced through the antecubital vein to the innominate or superior vena cava, through which a drip of 20-40% glucose can be given. The femoral vein can be used in the same manner. Care must be taken not to overload with fluids and one should watch for hypervolemia and subsequent congestive heart failure.

The potassium content is frequently lowered in liver failure, so by giving additional glucose a further lowering of potassium will occur; therefore, it is often necessary to add supplementary potassium. The amount is determined by the serum level and the electrocardiographic changes.

Since the serum sodium is often lowered and terminally is always low, saline may be added. The use of hypertonic saline in the terminal stage has never been found to be helpful.[7]

Oliguria, anuria, and a rise in the blood urea nitrogen occur with a fall of blood pressure terminally. Recovery does not usually take place. The use of steroids has been advocated by some. The greatest benefit has been observed when the impending coma or coma occurs associated with acute hepatitis. Large doses of cortisone (600-1000 mg.) daily have been advocated.[8] On a few occasions I have used steroids in impending coma where there was a mared lowering of the serum sodium, low potassium, ascites and jaundice, and have been able to produce diuresis which has been associated with improvement of the patient.

If one follows the daily urinary output and notes a rather sudden diuresis that is an excellent indication that recovery from the acute phase is taking place.

Summary of Therapy

To summarize in outline form, then, the treatment of patients with severe liver injury in impending coma or coma, the following measures should be utilized, dependent upon the severity of the metabolic encephalopathy:

1. No proteins in diet.
2. Large amounts of glucose; oral, intragastric drip or intravenous drip.
3. Add parenteral Vitamin B complex and potassium (as needed) to intravenous drip.
4. Antibiotics (Neomycin or Chlortetracycline preferred).
5. Cathartic, if gastrointestinal bleeding has occurred.
6. Blood replacement if patient has bled.
7. Oxygen as needed (use of 5-10% CO_2 and O_2 if in respiratory alkalosis).
8. Eliminate precipitating factors when possible.
9. Correct electrolytic abnormalities when possible.
10. Avoid narcotics.
11. Close observation; for evidence of congestive heart failure with or without pulmonary edema; of the urinary output; of outward signs of electrolytic disturbances.
12. The use of Glutamic acid as sodium glutamate, of L-Arginine and of steroids may have their place but at this time there is insufficient knowledge as to their value. Certainly to date there is no evidence that would demand their use.

Conclusions

1. Our knowledge of the pathogenesis of hepatic failure is still incomplete; however, certain facts have been brought to light regarding the role of ammonia and the relationship of the

Conservative Management of Post-Operative Surgical Complications in Pulmonary Tuberculosis *

Nathan Levene, M.D., Herbert Wald, M.D.,**
Julio N. Coelho, M.D., Don C. Fields, M.D.
Louisville, Ky.

In spite of many advances in the field of pulmonary surgery, numerous post-operative complications are still encountered in tuberculous patients. This presentation will be concerned with the prevention, diagnosis and treatment of the complications in a consecutive series of 145 cases, which represents the operative work done from April, 1956 through March, 1957, (Table I) at the Kentucky State Tuberculosis Sanatorium, District #2. This series was selected for careful review rather than our entire series of 930 cases because our mode of therapy in the more serious complications has changed during the past eight years.

TABLE I
Operations Performed
April, 1956—March, 1957
District Two, Kentucky State Tuberculosis Sanatorium

Pneumonectomies	13
Lobectomies	50
Lobectomy and Segment	17
Lobectomy and Wedge	21
Segment	12
Segment and Wedge	5
Wedge	22
Paulino	4
Schede	1
Total	145
Bronchoscopy	17
Secondary Thoracotomy for Bleeding	2
Tracheotomy	1
Post Resection Thoracoplasty	14

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***Department of Surgery, University of Louisville School of Medicine.*

One or more complications (Table II) have been encountered in 62 cases (42.7%). In many instances, they are of no major consequence, especially if recognized early and adequately treated. Some of the more serious complications, even if early diagnosis is made and therapy instituted, may result in a prolonged period of convalescent care.

In the past, early surgical intervention was attempted when serious complications were encountered, but our results in many cases proved to be so unsatisfactory that we adopted a more conservative regimen of therapy. The present review will concern itself chiefly with such complications.

TABLE II

Complications	
Atelectasis	21
Post-operative Hemorrhages	7
Delayed re-expansion of remaining lung (includes 9 empyemas)	33
Wound Drainage	6
Failure of Sputum Conversion	10
Spread of Disease post-operatively	2
Post-operative Hemoptysis	5
Cardiac Complications	2
Jaundice	1
Thrombophlebitis	1
Purpura	1
Deaths	6

Postoperative Routine

Atelectasis due to retained secretions can often be avoided by encouraging the patient to cough and instructing the nursing personnel how to assist the patient by supporting the

cerebrum to hepatic coma.

2. The principles of treatment today must be based upon this knowledge, inadequate as it is. If these principles of the use of large amounts of glucose, avoiding all protein and correcting electrolytic disturbances when possible, plus avoiding all factors that will precipitate coma, are constantly kept in mind, more patients will survive this catastrophe.

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chest and giving adequate sedation.

The management of post-operative hemorrhage should begin in the operating room by meticulous hemostasis before the chest is closed. All major air leaks should also be sutured at the time of surgery. In spite of the above two measures, bleeding and leakage of air will still occur to varying degrees and for this reason, in partial resections, anterior and posterior tubes are placed in the chest and connected to underwater seal drainage with suction.

The drainage system must be checked at frequent intervals to be sure it is in proper working order, so that fluid will not collect or air pockets form. Frequent physical examinations of the chest, along with post-operative chest films, are essential in evaluating the patient's status. Adequate antibiotic coverage is used routinely to diminish the incidence of infection. Careful case selection, especially in the older age group, will diminish the incidence of cardiac problems and for this reason we often request preoperative cardiac consultation. Pulmonary function tests and exercise tolerance determinations also have been helpful to us in avoiding surgery on the extremely poor risk patient.

Atelectasis

Atelectasis, diagnosed by x-rays, occurred in 21 cases, (14.4%). Without adequate nursing care this incidence would have been even higher. Placing a hand in front and back of a patient's chest during coughing gives a great deal of support and thus lessens the pain. Nursing personnel should be trained to do this, and where there is a shortage of personnel, members of the patient's family should be so instructed.

Post-operative pain plays a major role in the production of atelectasis. We have tried many procedures to diminish this pain, but it seems to make very little difference whether the incision into the pleural space is intercostal or through the bed of a resected rib. The age of the patient and the magnitude of the surgery should be the deciding factors with regard to the excision of a rib. Crushing or dividing intercostal nerves has also been tried without benefit. Adequate but not excessive sedation must be given as an effective cough often may be obtained after the administration of a narcotic.

When the patient is unable to cough effectively, transnasal suction or bronchoscopy must be done. Transnasal suction is frequently done by the nursing staff; thus we have no record of the number of cases in which it was used. In four cases (2.7%), atelectasis diagnosed on X-ray was successfully managed this way. When this fails, bronchoscopy is done, as was necessary in 17 cases (11.7%). Bronchoscopy should be performed in any case in which there is some question of atelectasis on the x-ray. Frequently the bronchoscopy is done in the patient's bed without moving the patient to the operating room. Only a small amount of topical anesthesia is usually necessary. Patients will often complain about having the procedure done, but afterward the improved respiratory exchange makes them most grateful.

If frequent aspirations are required, tracheotomy should be done, as was performed in one case. Aerosols containing detergents and Tryptar® may be tried. To date we have not been impressed with the results obtained after using these medications.

Post-operative Hemorrhage

Post-operatively, severe bleeding into the pleural space was encountered in 7 cases (4.8%). Moderate bleeding occurred in many others, but with adequate drainage and replacement, no major problems were encountered, as motion of the lung, heart, diaphragm, chest wall and other mediastinal structures defibrinate the blood and keep it liquid. If bleeding is rapid, the above mechanism will fail and clots will accumulate in the pleural space.

Surgery in advanced pulmonary tuberculosis leads to a high incidence of bleeding problems because of marked adherence of the lung, usually in the apex of the chest. Whenever possible, the lung is freed intra-pleurally and the adhesions are individually tied. When this is not possible, extra-pleural dissection must be done, which results in a denuded surface. The usual source of post-operative bleeding is from these severed adhesions and raw areas of the extra-pleural dissection. The presence of these raw areas plus lessened motion in the apex of the chest may lead to the formation of blood clots in the apex of the chest. From the apex the clots then tend to extend to the remainder of the pleural space. The following measures should be taken to prevent post-operative blood loss:

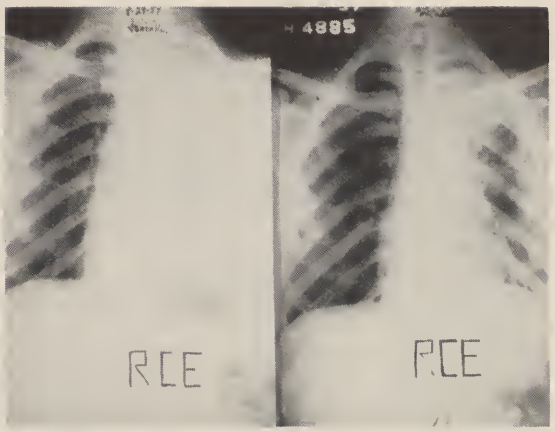
1. Adhesions should be tied whenever possible.
2. Bleeding points in the area of extra-pleural dissection must be controlled, usu-

ally with suture ligatures.

3. The intercostal or rib bed incision should be carefully checked and bleeding points ligated.
4. Vitamin K is used routinely preoperatively and postoperatively, as our patients receive antibiotics before and after surgery. There are other compounds on the market that are recommended to reduce capillary bleeding, but to date we have failed to note any marked benefit from these preparations.

When bleeding does occur, it should be diagnosed as early as possible and the necessary measures should be taken to control it. The volume of drainage in the bottle is often the earliest sign. Nurses should be taught to strip the tubes, thus preventing blockage by clots. A rising pulse rate and a somewhat later fall in blood pressure are often early signs of bleeding. If a diagnosis of severe bleeding is made, the blood should be replaced at as rapid a rate as necessary. We have found portable x-rays of the chest to be very useful in helping us decide when to do a second thoracotomy to stop bleeding. An x-ray cassette is placed beneath the patient and an over-exposed film is then made. If the film shows aerated lung on the side operated on, and no mediastinal shift, conservative measures may be followed. This occurred in five (3.4%) of the cases. When the side operated on shows complete absence of lung markings, and beginning mediastinal shift, thoracotomy is definitely indicated and should be done as soon as possible, as was necessary in two cases (1.4%).

One will encounter bleeding which is between the extremes described. In these instances, if the patient's general condition is satisfactory and the drainage of blood is diminishing, the patient may be followed quite accurately with serial chest films. If one is in doubt, it is usually better to do open thoracotomy before an excessive amount of blood is given. In most cases, simply opening the chest and removing the clots (thus correcting the mediastinal shift) are enough to improve markedly the patient's general condition. Usually very few bleeding points are found even when the blood pressure returns to normal while the chest is open. The underlying lung usually expands well, as was noted in two cases in this series. (Fig. 1)



A B

Figure 1

Post-operative hemorrhage after segmental resection, L. U. L.
A—18 hours post-operatively—increasing cloudiness with slight mediastinal shift. B.P. 128/96—P 120
B—X-ray following second thoracotomy—Status satisfactory

When one elects to treat the patient without thoracotomy, there is still the problem of removing the blood clots. While the clots are in the chest, the underlying lung in a partial resection cannot expand and fill the pleural space. In our five cases, the clots were liquefied with streptokinase — streptodornase. This therapy was instituted 24-36 hours after surgery. The drainage tubes are clamped and the drug is put in through the anterior tube. When dissolving the drug, the bottle should not be shaken as this may inactivate the enzymes. Often, it is necessary to repeat the injection on two or three occasions. In spite of early streptokinase —streptodornase therapy, three patients developed post-operative air pockets with delayed re-expansion. These cases were managed without additional surgery by the method discussed below.

Delayed Re-Expansion of Remaining Lung

The most frequent complication we encountered was failure of the remaining lung tissue to expand out to the chest wall early, thus obliterating pleural pockets. This occurred in thirty-three cases (22.7%). Table III lists the methods of management used in these cases. When a portion of the lung is removed the remaining lung tissue must increase its expansion or the pleural space must diminish in size. Removal of excessive amounts of lung tissue or pulmonary fibrosis (secondary to disease or long standing collapse) may not allow the remaining lung to fill the pleural space. Some

TABLE III

Methods of Management in Cases with Delayed Re-Expansion

Spontaneous Absorption	4
Needle Aspiration Only	13
Aspiration Failure, then Thoracoplasty	7
Aspiration, Thoracoplasty, Intercostal Tube Drainage	2
Thoracoplasty only	4
Intercostal Tube Drainage	2
Thoracoplasty and Intercostal Tube Drainage	1
Total	33

compensatory mechanisms may take place to reduce the size of the pleural space. These include elevation of the diaphragm, shift of the mediastinum to the side of operation, and closer approximation of the ribs. Further reduction of the size of the space may also be obtained surgically, as with thoracoplasty. The latter is most undesirable to the patient because of the resulting chest wall deformity.

Thoracoplasty following partial resection is now done primarily when a space problem is encountered, rather than routinely as in former years. In our earlier cases, thoracoplasty was done in all cases in which a lobe or more was removed. The indications in this early series were not only space problems, but also prevention of over-expansion of the remaining lung. The argument was then advanced that a delayed or post-excisional thoracoplasty tended to collapse only the apical portion of the remaining lung and that a thoracoplasty done at the time of resection would prevent over-expansion of all of the remaining lung. We accepted the latter idea and a review of our earlier records reveals that simultaneous thoracoplasty with resection was done in 74 cases. No deaths occurred in this series and we were quite satisfied with our results.

As the years passed, there developed a trend toward fewer post-excisional thoracoplasties.[2, 3, 4, 5] There is now evidence that over-expansion of the remaining lung does not lead to deleterious effects.[1, 2] In our institution, the post-operative follow-up on cases without thoracoplasty proved them to be so satisfactory, if no space problem was present, that we have abandoned the routine post-resection thoracoplasty.

At the present time, the following space problems are used as indications for thoracoplasty:

1. If a patient has undergone pneumonectomy and is below the age of 60, the pleural space is reduced in size by thoracoplasty. We hesitate to add the second procedure in some of our older patients.
2. Removal of excessive amounts of lung in a partial resection will require the reduction of the pleural space. For example, if the basal segments of a lower lobe are all that remain, thoracoplasty simultaneously or as a delayed procedure is indicated.
3. If there are fibrotic changes present, the lung tissue will be unable to expand sufficiently to fill the pleural space. Today, this is seen usually in cases of long standing collapse that come to decortication.
4. Our most frequent indication today is delayed re-expansion in partial resection that fails to respond to conservative measures.

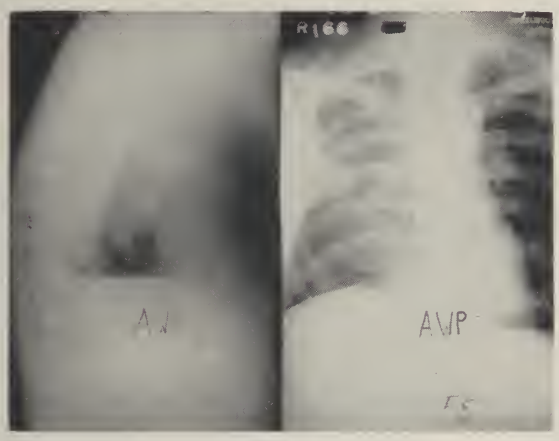
Drainage and Aspiration

The problem of the incompletely expanded lung is frequently encountered early in the post-operative period; thus treatment must of necessity begin at this time. The diagnosis in most cases is apparent early on x-rays of the chest. If there is a blood clot in the chest the tubes become blocked very early. Treatment with streptokinase — streptodornase will open the tubes and liquefy the clot. After liquefaction of the clot, the lung may expand. If a pocket persists, we recommend management by the method to be described below. If the delayed expansion is due to air leaks (broncho-pleural fistulae), the patient will continue to lose air through the drainage tubes into the bottles. When air leakage is present beyond five or six days, the problem then arises as to how long one should leave the tubes in the chest. We agree with Pecora that prolonged intercostal tube drainage should be avoided as secondary infection may supervene.[4] It is our practice to obtain chest x-rays on the fifth or sixth day in these cases. The tubes are then clamped for 12-24 hours. The chest film may be repeated or fluoroscopy performed. If no increase in collapse is noted, the tubes are removed. When there is an increase in collapse, tube drainage with suction is re-instituted. In some patients the air leakage may become evident earlier than 12 hours and nurses are advised to remove the clamps if the patient becomes dyspneic or feels any marked discomfort in his chest. Since there is no disturbance to the drainage system, we

have found this a very safe routine as all that is necessary to re-establish the system is the removal of the clamps. A ball valve mechanism must be present as the discontinuation of suction frequently does not produce a change in the size of the pocket.

In some cases, there are no blood clots and no air leakage but the lung still fails to expand completely. The drainage tubes are checked to be certain they are open. When this pocket persists for three or four days, the same procedure as above is followed and the tubes are removed.

Following removal of the drainage tubes, chest aspiration was attempted in most cases in which a pocket was present. In four cases the pocket was too small to aspirate and obliteration was obtained spontaneously in about seven and one-half weeks. In thirteen cases aspiration using the following regimen was successful. (Figure II) Aspirations were begun three to four days after tube removal and repeated at weekly intervals until the space became too small to aspirate. Air may be obtained freely until the air leaks (broncho-pleural fistu-



A B

Figure II

A—Large air pocket with fluid level seen posteriorly on lateral film.

B—After successful aspiration therapy 2½ months later, pocket obliterated.

lae) begin to seal off. When partial or complete closure occurs, tightness will develop on aspiration and patients often will complain of pain in their chest. Fluoroscopy after aspiration may show increased expansion of the lung, but if the fistulae do not seal over the lung may return to its previous level of expansion. The latter fact should encourage the surgeon to persist with aspiration therapy as in most instances complete closure of the fistulae will occur and the lung will then expand. When no infection supervened, the pockets were obliterated in about eight weeks.

In three of the thirteen cases successfully aspirated, empyema occurred. The first case required five months and the second case required nine months to obliterate the space. In the third case the pocket persists, but is too small to aspirate after nine months of therapy.

Thoracoplasty

In nine cases thoracoplasty was necessary to obliterate the residual pocket when aspiration failed. The lung failed to expand to the level of the clavicle; thus little hope for success could be anticipated from aspiration therapy. If the lung expands only to the level of the hilum, thoracoplasty should be done as soon as the patient will tolerate a second operation, as these cases are good candidates for the development of a broncho-pleural fistula and empyema if the space is not obliterated early. In two of these cases empyema developed and thoracoplasty was delayed until aspiration brought the infection under control. Tube drainage as well as thoracoplasty was necessary in the latter two because the pleura was entered at the time of surgery.

In four cases, thoracoplasty was done because of the amount of lung tissue removed. In two of these the procedure was done simultaneously with the resection. In spite of the simultaneous procedure, a small pocket developed in one case. This pocket has now obliterated itself spontaneously.

Reinsertion of intercostal tubes was necessary in five cases. Two cases have already been described. In two cases the lung expanded after surgery and the drainage tubes were removed, but secondary collapse occurred a day or two later. Tube drainage was reinstituted and early re-expansion occurred. It is interesting to note that no case in which the tubes were removed for persistent air leakage required re-insertion of a tube. Secondary collapse does occur in these, but not often. In the fifth case requiring tube insertion, thoracoplasty without using aspiration was done. The pleura was entered and tube drainage was necessary because of the leakage of air.

Empyema, one of our most difficult complications, occurred in nine cases (4.8%). By definition, an empyema is present when the residual pocket becomes infected and purulent material can be obtained from it. A broncho-pleural fistula does not always lead to em-



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TABLETS: Each tablet contains 0.5 Gm. (7½ grains) of sulfamethoxypyridazine. Bottles of 24 and 100 tablets.

SYRUP: Each teaspoonful (5 cc.) of caramel-flavored syrup contains 250 mg. of sulfamethoxypyridazine. Bottle of 4 fl. oz.

1. Nichols, R. L. and Finland, M.: *J. Clin. Med.* 49:410, 1957.

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pyema. It is on this hypothesis that we advise conservative measures in the management of the residual air pocket. When an empyema is first diagnosed, fluid and air are aspirated and large doses of antibiotics are given systemically and intrapleurally. Sensitivity tests on the organisms has proved to be a useful guide in the selection of antibiotics.

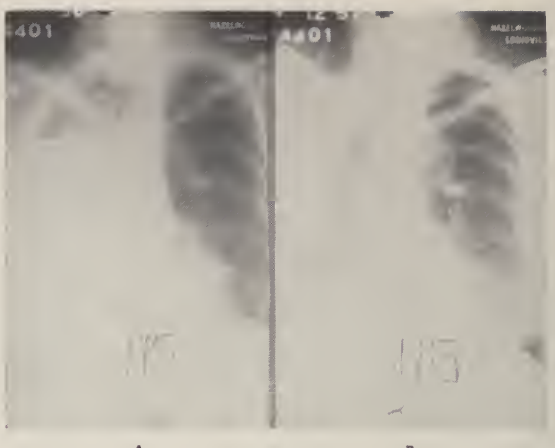
If, after several days, the patient's course continues to be febrile and a marked productive cough is present, then more adequate drainage must be obtained and an intercostal drainage tube is inserted. Following this, a thoracoplasty must be done to obliterate the residual pocket. When extensive wound breakdown occurs a Schede operation may be necessary in addition to thoracoplasty. In earlier years procedures such as bronchoplasty or removal of additional lung were done. These procedures carry a very high mortality rate with a very small percentage of success, and for this reason we have almost given them up and adopted our present regimen.

Wound Drainage

Wound drainage occurred in six cases (4.1%) in this series. It is our feeling that when prolonged drainage is present the source is usually intrapleural. In two of our cases lobectomy had been done. The remaining lobe appeared adequately expanded, except for slight clouding. With conservative care drainage has ceased. In two cases patients developed apical air pockets. These cases have been described earlier. The drainage has been markedly reduced with nine months of conservative care in one and is now absent in the other. In another patient empyema and wound drainage occurred after lobectomy and segmental resection. (Fig. III) The remaining patient had an empyema treated with thoracoplasty. Following thoracoplasty tube drainage was necessary. The drainage stopped, the wound healed and the patient was discharged. It has been reported to us that the drainage site has since re-opened.

Sputum Conversion and Spread of Disease

In spite of all the procedures, including use of the drugs available to us, we have failed to arrest the patient's disease in nine cases (6.2%). In six cases the disease is bilateral and further surgery has been or will be done. Two patients have been given disciplinary discharges but are in other institutions in our program. A third



A B

Figure III

A—14 days post-operatively—Acute empyema after right upper lobectomy and segmental resection. Note fluid level.

B—5 months post-operatively—Successful treatment with aspiration and drug therapy, followed at 3 months post-operatively with thoracoplasty.

patient had wedge resection of the left lower lobe and simultaneous thoracoplasty two years

Discussion

In this series of 145 cases, 62 (42.7%) had complications of varying magnitude. To the casual observer this figure may appear to be prohibitive. Closer inspection reveals that adequate post-operative care diminishes the morbidity and thus gives acceptable results. Early active measures should be instituted in the handling of patients with atelectasis, post-operative hemorrhage, and acute empyema with broncho-pleural fistulae. Other complications, such as post-operative air pockets, subacute and chronic empyema, and wound drainage should be treated more conservatively.

Following resectional surgery, early thoracoplasty on febrile patients is quite dangerous. These patients will frequently have infection in the incision. The intrapleural space is almost always infected. The infection is acute and there has been no time for the patient to build up tissue resistance. Extra-pleural dissection is so often necessary in resectional surgery that the lining of the pleural space is subsequently quite thin and fragile. We have found accidental penetration into the pleural cavity under these circumstances is not uncommon if thoracoplasty is attempted, leading to dissemination of the infecting organisms into the subscapular space. Patients may then have a very stormy convalescence. One of us (N. L.) feels that he might have prevented some of his earlier mortalities had thoracoplasty been de-

layed.

after a left upper lobectomy. A residual air pocket developed which is now obliterated and we now have hopes his sputum will convert.

Spread of tuberculosis occurred in three cases. (2%) In two cases bilateral disease was present and the spread was related to hemoptysis occurring as a late complication after surgery on one side. In the third case the patient had a fibrotic lobe left in. An empyema developed and spread was related to this complication.

Other Complications

Hemoptysis occurred in five cases (3.4%) postoperatively. These were all bilateral cases. In one case it was massive and death resulted. In another spread occurred and pneumonectomy was later done. The other cases have had or will have surgery on their contra-lateral lung.

In two cases (1.4%) cardiac problems were encountered in aged patients, one 59 and the other 61. One developed EKG changes reported as coronary artery insufficiency with probable early myocardial infarction. The EKG subsequently returned to normal. The other patient developed a non-tuberculous pneumonitis about two months following a right pneumonectomy. She developed congestive failure which responded to digitalization.

Jaundice occurred in one patient following bilateral surgery. It was our impression that the jaundice was due to serum hepatitis. The patient was treated with bed rest and diet and recovered rapidly.

Thrombophlebitis occurred in one case. The patient was treated with rest and elevation of the extremity and the process rapidly resolved. There was minimal dependent edema of the extremity at the time of discharge four months post-operatively.

Purpura resulted three months post-operatively in one case. Thorazine® was suspected, but the condition rapidly subsided and no offending drug has been identified.

Deaths

Six deaths (4%) occurred in this series. Pulmonary insufficiency occurred in two cases with bilateral disease. Death occurred in one of these 24 hours after surgery. In the other, death occurred on the 17th post-operative day. One patient had a stroke. Massive hemoptysis from contralateral cavity produced one death. Transfusion reaction with anuria and cardiac arrest were the major factors in the remaining two cases.

The present series are all sanatorium cases. The duration of hospitalization is much less of a burden to these patients than it would be in a private hospital. This fact has given us the opportunity to carry out our method of conservative care. By following these measures not a single death due to acute post-operative empyema with open broncho-pleural fistulae occurred.

Summary

1. A one year series of cases undergoing surgery for pulmonary tuberculosis is reviewed.

2. The incidence of the various complications is presented, along with suggestions as to their prevention and therapy.

3. The indications for post excisional thoracoplasty are listed.

4. Emphasis is given to the conservative management of the patient undergoing partial resection with delayed re-expansion of the remaining lung.

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Plan now to attend the . . .

County Society Officers Conference

March 27, 1958

Hypertension of Renal Origin*

James A. Harris, M.D.

Lexington, Ky.

THE role played by the kidney in hypertension has, for many years, held the interest of investigators in various fields, including basic physiological research, clinical medicine, surgery and urology. Credit for the original concept that hypertension may be of renal origin is generally assigned to Richard Bright, despite the fact that he never measured blood pressure in man, and never actually established that a state of hypertension existed. Although the sphygmomanometer was not available until after his death in 1858, Bright recognized that the hypertrophied heart found at autopsy was frequently associated with renal disease. He related these two findings and even suggested that a substance of renal origin might have been the cause of the enlarged heart. He further postulated that the hypothetical substance increased action of the heart and subsequent hypertrophy through the process of increasing peripheral resistance to the flow of blood.

In the 99 years since Bright's death little has been added to this basic concept of hypertension; otherwise we might expect to have a more definitive term than essential, or better, perhaps, "cryptogenic" hypertension.

Over the years, a tremendous volume of literature has accumulated dealing with experimental production of renal hypertension. Results have been variable from animal to animal and from investigator to investigator. Most of the early experimental work involved methods that usually produced gross disturbances of renal function by removal of functioning renal tissue or by nephrotoxic substances, irradiation, occlusion of one or both ureters, renal vein ligation or arteriovenous anastomosis. Some of these did produce transient hypertension, but those that obtained prolonged hypertension also had associated renal excretory impairment.

Goldblatt's Work

Because pathologists had long noted the presence of intrarenal arterial and arteriolar sclerosis with great frequency in benign and malignant phases of hypertension, Goldblatt in 1934 approached the problem from the standpoint of producing the effect of renal vascular sclerosis without disturbing renal excretory function. His working hypothesis was (1) If stenosing vascular disease, limited to the kidney, or any renal condition which produces the same effect on renal circulation is the primary factor in the initiation of essential hypertension, then reproduction of the physiologic effect of such vascular disease should result in the development of hypertension. (2) Impaired renal excretory function should not be a necessary accompaniment of this type of experimental hypertension. (3) The disturbance of renal hemodynamics produced by sclerosis may be produced by constriction of the renal artery, and, if the basic hypothesis is correct, should result in hypertension. He found that in the dog, unilateral renal artery constriction produced a rise in blood pressure after 24 to 72 hours which lasted 4 to 6 weeks and then returned gradually to normal. In the sheep, goat, and rat, the blood pressure elevation was more sustained but tended to return eventually to normal. In all of the animals, if nephrectomy was done during the period of elevated blood pressure, the blood pressure promptly returned to normal.

If both renal arteries were constricted, the blood pressure elevation was permanent in the dog, monkey, rabbit, rat, cat, sheep, and goat; and both systolic and diastolic pressures were increased. In these animals, with permanent hypertension, there was no appreciable alteration of renal function. However, if the renal arteries were excessively constricted, renal excretory function was impaired and the animals followed the pattern of malignant hypertension. At autopsy, small arteries and arterioles of many organs showed changes usually seen with the malignant phase of hypertension. Surprisingly, though, even after 6 years of persistent benign hypertension in dogs, no significant pathological changes have been observed in the intima of the aorta or of large or small arteries that could be considered a result of the hypertension. Goldblatt felt that hypertension

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by itself could not produce generalized true intimal, arterial, or arteriolar sclerosis. On the other hand, bilaterally nephrectomized dogs with profound azotemia but without hypertension do not develop the necrotizing arteriolar changes. This suggests that a chemical substance alone is not sufficient for production of the arteriolar lesions. It would appear, therefore, that both hypertension and one or more chemical factors must be present in order to produce the necrotizing arteriolitis of malignant hypertension.

Pathogenesis

When one begins to speak of the pathogenesis of experimentally produced hypertension and essential hypertension, he is immediately launched on an endless sea of conflicting and ever increasingly complex data. On the basis of his experimental evidence, Goldblatt believes that experimental hypertension and essential hypertension in man have a common renal origin involving renal hemodynamics, while many other investigators feel that the two are not analogous and that essential hypertension is primarily a vascular disease. Homer Smith succinctly summarizes the present situation by saying "to read the rapidly expanding literature on this subject is only to discover the complexity of the problem of ultimate etiology. One observer holds that hypertension is of dietary origin while another relates it to climate, both interpretations being far from negligible since the incidence of the disease is remarkably low among primitive people. By other observers it is contended that there is a distinct hereditary trend at least in predisposition while correlation with endocrine imbalance is not lacking. At the other extreme, psychoanalysts tell us that the early fluctuating phase of essential hypertension in a manifestation of a psychoneurosis based on excessive and inhibited hostile impulses. The liver, posterior pituitary and adrenal cortex have been placed under suspicion. Almost everything except the gonads have, at one time or another, been implicated so that one must admit that the theory of genesis of hypertensive vascular disease is at the moment "all balled up."

Whatever the relation of experimentally produced hypertension to essential hypertension, it can be accepted that experimental renal hypertension has its counterpart in some forms of unilateral and intrinsic bilateral renal disease in man. Although there is serious doubt that the kidney plays any primary part in essential hypertension, there are few physicians who will deny the cause and effect relation in hypertension associated with polycystic renal disease, glomerulonephritis, chronic pyelonephritis or other disease involving reduction of renal parenchyma. However, the incidence of hypertension of renal origin is low, and accounts for probably no more than 10 per cent of the incidence of hypertension in adults.

Unilateral Renal Disease

For this reason, the belief that unilateral renal disease can be the primary cause of hypertension and that removal of the diseased kidney can cure hypertension has suffered phasic episodes of popularity and disrepute. Although many series of cases have been reported, evaluation is difficult because of the variation in criteria for establishing the presence of hypertension and for determining cure after nephrectomy. It is now generally felt that the minimal criteria should be: first, definitive hypertension well-established preoperatively and not based on one or a few blood pressure determinations made during an acute illness or just prior to operation; second, that after operation the blood pressure must be reduced to the generally accepted normal range namely 140/90 or lower; and third, that the pressure must remain within normal limits for at least one year.

When all reported cases are reviewed and all that do not meet these criteria are rejected, the results of nephrectomy for unilateral renal disease with coexisting hypertension are found to be surprisingly good. In 1948, Smith, using the above mentioned criteria, found 19 per cent cures among 242 reported operations.

In 1952, Thompson and Smithwick reported an additional 57 patients treated between 1948 and 1952, and found 46 per cent cured. In 1956, Smith again compiled all reported cases since Butler's first report in 1937 and found 575 patients with well-established hypertension that had been subjected to nephrectomy. Of these 575 patients, 149 or 26 per cent have one year cures. Thompson also in 1956 reported 3,000 nephrectomies done at the Mayo Clinic in 15 years, 1940 through 1954. Of these 3,000 cases a diagnosis of hypertension was made preoperatively in 344, or about 11 per cent. Seven cases were rejected and of the remaining 377 patients, 39 had nephrectomy for renal tumor and 29 had combination nephrectomy and unilateral sympathectomy. Because

of difficulty in evaluation, these were also rejected leaving 269 cases for study. Of these, 100 had nephrectomy for atrophic pyelonephritis and 169 had other renal disease. Results one year after operation on these groups are as follows:

Disease	Total Patients Followed	Good effect Pts.	%	Poor effect Pts.	%
Atrophic pyelonephritis	64	35	54.6	29	45.4
All other renal disease	100	25	25.0	75	75.0

Thompson adheres strictly to the criteria of well-established hypertension and postoperative levels of 140/90 or lower. It should be noted that many cases classified as poor effect actually had excellent clinical improvement with marked blood pressure reduction but still not to normal levels.

There are, of course, many weaknesses inherent in these data. First, there are probably many more failures than successes which remain unreported. On the other hand, the criteria imposed leave many good results that cannot be classified as cures, and many cures of less than one year at the time of reporting that are probable cures.

Importance of Diagnosis

It now seems incontrovertible that unilateral renal disease in man can produce benign or accelerated hypertensive disease. In this respect, man is similar to the rat and the rabbit, but not the dog, in which bilateral arterial constriction is necessary to produce sustained hypertension. It also seems incontrovertible that nephrectomy for unilateral renal disease in hypertensive patients may produce a cure in 25 to 50 per cent of these patients. This is important because if one excludes certain well-defined causes of hypertension, such as pheochromocytoma, coarctation of the aorta, and functioning adrenal tumors, the urologist today has the only demonstrated apparently permanent cure of hypertension.

This fact places a premium on the early diagnosis of unilateral renal disease. Unfortunately, the single diseased kidney may cause no symptoms and may be completely overlooked in the evaluation of a hypertensive patient. This places great responsibility on the internist and general practitioner to make sure that, in their eagerness to reach for the ganglion-blocking agent or the tranquilizing drug, an opportunity for a possible cure for the patient is not missed.

Certainly the problem of diagnosis does not end when the patient comes to the urologist. Although the large majority of cases of unilateral renal disease will be readily found through use of conventional urological procedure, there remains a small group that will not be discovered without the use of special techniques. These include the occasional partial renal arterial occlusion which may be demonstrated by aortogram; or the diseased kidney that appears much like its mate on urogram, but by the use of separate endogenous creatinine clearance, is shown to have a marked reduction in function. In the patient with demonstrated kidney disease, in whom conservation of functioning renal tissue is essential, differential renal study by the endogenous creatinine clearance method may rule out surgical intervention and save a life.

Illustrative Case

I would like to present briefly a case illustrating the occasional pleasing result that may be obtained.

A 58-year-old white female was seen on May 14, 1956, at which time she complained of intermittent right abdominal discomfort for many years. She had a history of well-established hypertension ranging up to 190/110 and for which she had been under treatment for the preceding 10 years. There was a history compatible with myocardial infarct in 1945 for which she was placed on bed rest with good recovery. General examination revealed a grade one hypertensive retinopathy. The apex of the heart was percussed at the anterior axillary line and an apical systolic murmur was present. Blood pressure at this time was 170/100. The EKG showed changes suggestive, but not diagnostic, of old anterior myocardial infarction. Tenderness to palpation was found over the right upper quadrant but there was no costovertebral angle tenderness or palpable mass.

It was decided that the gall bladder should be the first object of investigation. The chole-

cystogram was normal but showed multiple stones over the right kidney and a large stone over the lower third of the right ureter. Intravenous urograms showed nonfunction of the right kidney with a normally functioning left kidney. Blood urea nitrogen was 13 mgms. per cent. Catheterized urine showed 20-30 white cells with an occasional red blood cell and no casts. Albuminuria was 1 plus; sugar, negative, and urine culture showed no growth in 48 hours. On May 16, 1956, total nephroureterectomy was done. Several renal stones were present, the renal pelvis was distended and the cortex was thinned. The ureter was dilated and the lower calculus was firmly impacted in the ureter. Microscopic examination showed marked atrophy of tubules and glomeruli.

The postoperative course was uneventful and following operation the blood pressure stabilized and remained at 120-130/60-80. On June 14, the patient returned for colon roentgenography and following manipulation for this study the blood pressure was 115/60. She has been followed by her local physician during the past year who reports that she has remained within normotensive range for well over a year. The urine has cleared completely and she is free of her abdominal discomfort.

Summary

It now seems well established that in a small group of hypertensive patients, unilateral renal disease can be the primary cause, and that removal of the diseased kidney will produce a cure of hypertension in up to 50 per cent of such cases. The decision for removal of the kidney must be based on criteria that would be followed were the patient not hypertensive—that is, hypertension itself should never be the indication for nephrectomy.

Finally, despite the deluge of blocking agent and tranquilizer literature which today covers our desks, not a single patient has been cured of hypertension by any form of therapy per os; and until the true etiology of essential hypertension is known, we must be especially watchful for those few patients that may be permanently benefited by surgical intervention.

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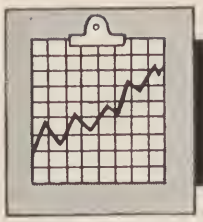
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CASE DISCUSSIONS
From The
University of Louisville Hospitals



Complete Genital Prolapse

Louisville General Hospital

Patient Protocol #114853

History

S. D., a 43-year-old negro gravida 4, para 2, was admitted to Louisville General Hospital on December 4, 1957 complaining of swelling of the left leg for one day. On superficial examination, the anterior and posterior vaginal walls were seen to protrude well outside the introitus, and the vulva had been removed surgically. The patient had no complaint about the protrusion, and repeatedly stated that she was only seeking medical attention to the swollen leg.

Clinical records showed that this patient was first seen in Louisville General Hospital in July of 1943, when she had a fungating lesion of the right labium majus and a total prolapse of the vagina. A low rectal stricture was described at that time, and the presumptive diagnosis of lymphopathia venereum was made. In May of 1944, another lesion of the vulva was biopsied, and was reported as showing epidermoid carcinoma, squamous cell type. Accordingly, in June of 1944 total vulvectomy and bilateral inguinal and femoral lymphadenectomy (Basset-Taussig operation) was performed. The lymph nodes removed during this procedure were free from metastases.

The patient was not seen again until 1949, when she was admitted with chronic pelvic inflammatory disease, and underwent subtotal hysterectomy and bilateral salpingo-oophorectomy. An unsuccessful attempt was made to repair the prolapsed vagina. During this admission, slight lymphedema of the left leg was noted. Although the patient was urged to return to regular tumor clinic for follow-up, she failed to do so, and was not seen again until the present admission some eight years later.

Physical Findings

On admission, the patient's blood pressure was 118/76, pulse 72, and respirations 20. No organs or masses were palpable abdominally. Well-healed incisional scars were present in both groins. The plastic results following the previous total vulvectomy were excellent. The left leg showed a four plus non-pitting edema. Homans' sign was absent, and the extremity was neither hot nor tender. No lymph nodes were palpable in inguinal or femoral regions. There was slight edema of the mons veneris.

The urethral mucosa was slightly everted at the external meatus. The cervical stump and the entire anterior and posterior vaginal wall protruded from the introitus for a distance of approximately 6 centimeters. A probe placed in the cervical os extended to a point approximately four centimeters from the external os. The vaginal mucosa was pale and atrophic. On the left anterior lateral aspect of the hypertrophied cervix, there was a punched out, superficial, friable ulcer which bled easily. A rectal stricture was felt about 2.5 centimeters above the external anal sphincter.

Treatment and Course in the Hospital

Following bed rest and elevation of the left leg, there was some diminution in the lymphedema. The cervical lesion was biopsied and reported as showing chronic cervicitis. Laboratory data included the following: hemoglobin 12 grams; hematocrit 35; WBC 4000 with 50 per cent polymorphonuclear leukocytes, 47 lymphocytes, and 3 per cent eosinophils. A catheterized urine specimen showed a specific gravity of 1.010 with no microscopic findings. Total protein was 8 grams, albumin 3.8, globulin 4.2. Serological tests for syphilis were negative. Roentgenograms of the lumbosacral spine showed no evidence of bony or articular abnormality. A chest film showed no disease. Intravenous pyelography showed no abnormality.

On December 15, ureteral catheters were placed in each ureter, and on the next morning the patient was taken to the operating room. At operation, an incision was made around the cervix and the anterior and posterior vaginal mucosa and bladder were dissected free from

the cervical stump. The cardinal ligament areas were then identified; as was expected, the quality of the fascia was extremely poor. This tissue was clamped, cut and suture ligated. The attachments of the cervical stump were severed, and the stump was removed without difficulty. The anterior peritoneum was opened and the cardinal ligaments were crossed in such a way as to suture the right cardinal ligament to the left angle of the vaginal cuff and vice versa. The broad ligament bases were then sutured together across the midline as well as could be done.

An anterior colporrhaphy with Kelly plicating sutures was then performed, and a posterior rectocele repair was carried out. There was much scarring of the posterior vaginal wall, so that identification of the levator ani muscles was difficult.

Following the operation, the vaginal vault was quite shallow and the vaginal cuff showed fair support. It was noted, however, that the vaginal prolapse was no longer present.

Postoperatively, the patient was afebrile and had no complaints. At the time of discharge on December 24, there was some residual lymphedema of the left leg. The immediate postoperative result was still satisfactory.

Discussion

DR. DOUGLAS M. HAYNES: The patient described presents an extreme example of a very common situation, genital prolapse. This is an all-inclusive term incorporating varying degrees of protrusion and descent of the bladder, rectum, uterus or any combination of these into the vagina. Considerable confusion exists as to the proper classification of prolapse. Certainly, however, there is universal agreement that complete genital prolapse implies the situation exemplified by the patient described, in which the entire vagina and uterus protrude outside the introitus.

When there is protrusion of vagina and cervix from the introitus, the diagnosis of a complete prolapse can be easily made by sounding the uterus and palpating the top of the sound outside the introitus. The term procidentia is often used as a synonym for complete genital prolapse, but since it is also used to designate various degrees of incomplete prolapse it is not an exact term, and should be avoided. The most commonly encountered forms of prolapse involve protrusions of the bladder and rectum into the vagina, and these are usually referred to as cystocele and rectocele respectively.

It is essential to approach the problem of prolapse from the point of view of the anatomical structures concerned. The uterus is normally held in place by condensations of the endopelvic fascia which extend from the sides of the cervix in the bases of the broad ligaments to the lateral pelvic wall. These fascial condensations are anatomically distinct structures, and are variously designated as cardinal ligaments, Mackenrodt's ligaments, or transverse cervical ligaments. Whenever there is stretching or attenuation of these fascial supports, the uterus will descend somewhat into the vagina. Accessory structures which help in the support of the uterus at its normal level are the uterosacral ligaments, which also represent condensations of the endopelvic fascia. It must be emphasized that the anterior and posterior vaginal walls are supported by their own specific fasciae, so that the operative repair of uterine prolapse will not correct vaginal prolapse.

The surgical principle involved in the repair of cystocele and rectocele is embodied in the operation of anterior and posterior colporrhaphy. This procedure consists of incisions in the vaginal mucosa, separation of the underlying fascia propria of the vagina, and imbrication of this dissected fascia across the midline very much as one might repair a direct traumatic hernia. The surgical treatment of uterine prolapse can be approached in various ways, depending upon whether it is desirable to preserve the uterus or not. Most American gynecologists feel that if there is only slight prolapse of the uterus combined with small degrees of cystocele and rectocele, an asymptomatic patient who wishes to have more children should be left alone until symptoms supervene and until she has as many children as she wishes; at this point, the operation of choice is vaginal hysterectomy combined with anterior and posterior colporrhaphy. European gynecologists, on the other hand, look with some favor upon the so-called Manchester operation, in which the cervix is amputated and the freed medial ends of the broad ligament bases are shortened and sewed across the anterior surface of the lower part of the uterus, a new pseudocervix being constructed by plastic methods using vaginal mucosa. If the prolapse is of mild degree, and the broad ligament bases are com-

posed of fairly dense bands of connective tissue, this operation can be used quite successfully to support the uterus, and it may be combined with vaginal repair when that operation is indicated.

Unfortunately, in the young patient with congenital prolapse in whom preservation of the uterus would be most desirable, the quality of the fascia is usually so poor that the operation is contraindicated. Follow-up studies on patients subjected to the Manchester operation have shown that following the amputation of the cervix the patient's chance of carrying a normal pregnancy to term are only of the order of 30 per cent, so that the operation is of limited usefulness if the preservation of the uterus is sought for childbearing purposes. This fact is perhaps the primary reason why the Manchester operation has not been popular in the United States.

The treatment of complete genital prolapse represents a technical problem of considerable magnitude, as obviously these patients' supporting connective tissues are of very poor quality. When such a prolapse occurs in a woman who is many years postmenopausal in whom there is senile attenuation of the fascia in addition to the mechanical stretching following past obstetric episodes, one feasible solution of the problem is the so-called Le Fort partial colpectomy in which the anterior and posterior vaginal walls are denuded and sewn together. This operation has obvious disadvantages, and cannot be utilized in any patient in whom preservation of vaginal patency is indicated. On the other hand, the operation is well tolerated even by the extremely aged patient, and has certain definite indications in selected women of advanced age. The management of complete genital prolapse when preservation of the vagina is an essential part of the objective is usually best accomplished by careful vaginal dissection of the anterior and posterior vaginal walls coupled with vaginal hysterectomy. However, this operation stands a considerable chance of failure, and with each recurrent prolapse the technical operative problem becomes greater.

An alternate approach is a modified Moschcowitz procedure, the principle of which involves abdominal dissection of the vaginal fascial propria and specific attachment of intra-abdominal supporting fascia to the vaginal apex. Sometimes combined abdominal and vaginal approaches may be attempted, although by and large the vaginal route is the one usually best suited to the problem. The latter method was elected in the patient described, and was probably as likely to be successful as any other that might have been applied.

This patient's history of vulvar carcinoma was unrelated to the genital prolapse. Certainly the excellent cosmetic result and the eight year cure of a proved carcinoma of the vulva testifies to the effectiveness of the Basset-Taussig operation for carcinoma of the vulva. This standard operation should be applied to all operable cases of cancer of the vulva, and consists of a complete bilateral vulvectomy and bilateral inguinal and femoral lymphadenectomy. The lymphedema of the left leg appeared to be a chronic rather than an acute process in spite of the patient's sudden realization of it; it was never explained entirely satisfactorily, though the probabilities are that it was secondary to the old femoral lymphadenectomy.

February Case Discussion Correction

"A Case of Salicylate Poisoning," which appears on page 151 in the February issue of the Journal was from Children's Hospital in Louisville and not Louisville General Hospital as inadvertently printed in the Journal, according to L. T. Minish, M.D., Case Discussions Editor.

EDITORIALS

A Milestone on the Road Ahead

DECEMBER 10, 1957 was a date of importance to the future welfare of Kentucky. On that day ground was officially broken for building of the Medical Center of the University of Kentucky at Lexington. Appropriate ceremonies were observed, attended by representatives of business, civic organizations and professions from all over the State. The Governor, the president of the University and its immediate past president, and distinguished men and medical leaders from other states were present and spoke upon the significance of this new enterprise to the health and progress of our people.

The Medical Center at Lexington will afford the opportunity for more Kentucky young men and women of every race and creed to prepare for their chosen fields in medicine, dentistry, nursing and affiliated professions. It will help provide a larger number than we have ever before been able to educate, and eventually many will find their way into the heretofore neglected areas.

The Center in Lexington will not limit nor hinder the work in these fields which has, for more than a century, been carried singly by the schools in Louisville but, we earnestly hope and believe, will stimulate them to better and greater achievements.

Throughout the planning of the past few years no one has raised a voice, except in praise, for what the University of Louisville has done for our state and the entire Country during its more than 130 years of activity. No one has suggested once that our appropriations from the state be reduced. It has become a universal theme that nothing should be done to harm in any way its progress. To build one school at the expense of another would be so patently futile that no one has been willing to entertain such a thought.

Mr. Stephen Watkins, president for three years of the Kentucky Medical Foundation, and Mr. William H. Skinner, president during the past year, have emphasized this policy at every meeting of the Foundation and there has not once been any dissent. It is certain that the new president, Dr. J. S. Chambers, will continue the same attitude. Mr. Watkins and Dr. Chambers personally used their influence in an effort to prevent any reduction in our appropriations.

Now that the Medical Center is a certainty, the Foundation will direct its efforts more specifically toward its larger objectives; namely, the improvement in health conditions generally throughout the state, care of the medically indigent, physician placement, and the securing of endowment funds for teaching. Thus far it has proved an effective force in focusing public attention on the problem of medical education in the state; it will undoubtedly help toward the solution of some of the problems of medical care in general. It seems appropriate that all physicians join with this civic minded group in working toward such a common purpose.

SAM A. OVERSTREET, M.D.

Honor to Whom Honor is Due

AT the dinner meeting following the ground breaking ceremonies for the new medical school at the University of Kentucky on December 10, 1957, William R. Willard, M.D., Dean, paid appropriate tribute to John Chambers, M.D., and presented him a plaque bearing this inscription.

To
Dr. John S. Chambers
Commemorating
Ground breaking of the University of Kentucky Medical Center

You had the vision of a great medical center and worked for its achievement.

Doctor Chambers came to the University of Kentucky, September 1, 1928 and directed the medical service there, under the presidencies of Doctor McVey, Doctor Donovan, and Doctor Dickey, until November 1, 1957 when he retired. During this entire period he engaged in the collection of data concerning medical education and medical care for all the people, with the clear vision of the eventual establishment of a medical school and center at Lexington.

Few indeed have any idea of the voluminous reports and statistics this pioneer and planner gathered during these thirty years. Often he worked singlehanded and dreamed his dreams alone. But, never once did he waver in his conviction or change his objective. To him, more than to any other person, belongs the credit for this new enterprise.

And, in the decades to come, Kentucky will be immeasurably better for his vision and tireless—often thankless—efforts.

Sam A. Overstreet, M.D.

Opinions expressed in contributions to The Journal are those of the writers and do not necessarily reflect the views of the Kentucky State Medical Association.

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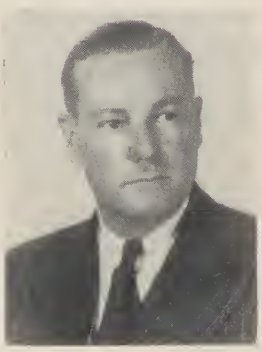
Dr. Gundersen



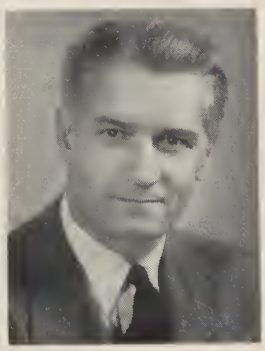
Mr. Castellucci



Dr. Alphin



Mr. Clephane



Mr. Ebel



Maj. Gen. Robinson



Mr. Throckmorton

Thursday, March 27

Phoenix Hotel, Lexington

ORGANIZATION SECTION

Plans for Officers Conference March 27 Complete

"The County Society Officers Conference in Lexington on March 27—a highlight of the KSMA year—is a 'must' for all county society presidents, other county society officers and committee members, and all KSMA chairmen, councilors and officers," according to Edward B. Mersch, M.D., KSMA president.

Plans for the day-long meeting (from 9 a.m. to 3 p.m. Central Daylight Saving Time) at the Phoenix Hotel are now in the final stages, he stated. Every member of the KSMA and all board members of the Woman's Auxiliary are invited to attend.

Seven nationally known speakers will be featured, including Gunnar Gundersen, M.D., LaCrosse, Wisconsin, president-elect of the AMA, who will give an address at the luncheon.

Other prominent speakers scheduled are: Thomas H. Alphin, M.D., director of the Washington Office of the AMA; Arthur J. Clephane, Philadelphia, attorney for the Pennsylvania State Medical Society; John W. Castellucci, Chicago, executive director of the Blue Shield Plans; Oliver Ebel, Topeka, executive secretary of the Kansas State Medical Society; Major General Paul I. Robinson, Washington, D. C., executive director of the Dependents' Medical Care Program; and Robert B. Throckmorton, Des Moines, attorney for the Iowa State Medical Society.

Dr. Mersch to Address Meeting of 13th Councilor District

The annual joint meeting of the 13th Councilor District and the District Four State Tuberculosis Hospital is scheduled for Thursday, April 17, in Ashland, according to Charles B. Johnson, M.D., Russell, District Councilor.

"Complacency" is the subject of a talk which will be given by Edward B. Mersch, M.D., Covington, president of the KSMA, at the dinner that evening.

The morning session, under the auspices of the District Four State TB Hospital, will be held in the hospital. Afternoon and evening sessions will be at the Henry Clay Hotel in Ashland. Members of the Boyd County Medical Society will be hosts at the meeting.

Following is the program:

Morning Session

9:30 Registration and Coffee

10:00 "Diagnosis and Treatment of Solitary Pulmonary Nodules," W. Porter Mayo, Lexington

10:40 "Allergic Manifestations in the Respiratory Tract," Lloyd D. Mayer, M.D., Lexington

11:20 "Hazards of Diagnostic X-ray Investigations," Leslie D. Urban, Ashland

12:00 Luncheon — Courtesy of District Four TB Hospital

Afternoon Session

2:00 "Eclampsia," Glenn W. Bryant, M.D., University of Louisville School of Medicine

2:30 "Cardiac Evaluation of Surgical Patient," Walter S. Coe, M.D., University of Louisville School of Medicine

3:00 "The Heart-Lung Machine in Cardiac Surgery," John Young Templeton III, M.D., Jefferson Medical College, Philadelphia, Pa.

4:00 Intermission

5:30 Social Hour—Ball Room, Henry Clay Hotel Ashland

6:30 Dinner

"Complacency," Edward B. Mersch, M.D., Covington, president, Kentucky State Medical Association.

Louisville Physicians to Speak at Harrodsburg Seminar

Four Louisville physicians—Douglas M. Haynes, Joseph A. Little, William T. Rumage, and Malcolm Stanley—will be featured on the program of the Third Annual Postgraduate Seminar at the Beaumont Inn, Harrodsburg, April 3.

The seminar, sponsored jointly by the KSMA Committee on Postgraduate Medical Education, the University of Louisville School of Medicine, and the Kentucky Academy of General Practice, is one of several annual regional conferences.

"This is part of the KSMA's continuing program for postgraduate education of Kentucky physicians," according to Walter Coe, M.D., chairman of the KSMA Committee on Postgraduate Medical Education. The full seminar program for the 30-County area was listed in the February issue of the Journal of the KSMA.

Public Health Comm. Announces Immunization Week, May 4-10

"If all Kentucky physicians would see that their patients get adequate immunization during Immunization Week, May 4-10, needless deaths from controllable communicable diseases could eventually be averted," said Delmas M. Clardy, M.D., Hopkinsville, who heads the KSMA Committee on Public Health.

This is the fifth year the Immunization Week drive has been sponsored by the KSMA in the interest of securing complete immunization of Kentuckians against communicable disease.

During the week, the Association, through the mediums of the press and radio, will make a special

effort to acquaint the public with the importance of protection offered by the Salk vaccine and the so-called "familiar stand-by" immunizations against typhoid, tetanus, diphtheria, smallpox, and whooping cough.

Each physician can do his part by reviewing the immunization records, learning the needs of his patients, and by displaying information on Immunization Week in his office.

Members Reminded to Pay Dues Before April 1 Deadline

"All KSMA members who have not already done so, are reminded to pay their county, state, and AMA dues before the April 1 deadline, as provided in the KSMA by-laws," Edward B. Mersch, M.D., Covington, KSMA president, said.

"Your county medical society secretary, like you, is a busy man," Doctor Mersch stated. "If you have not yet remitted your 1958 medical society dues, he will be grateful for your early cooperation."

He expressed appreciation for the membership reports already received in the Headquarters Office, saying that returns for January were approximately 50 per cent greater than those received in the same period last year.

Loss of your medical society membership, it was pointed out, may contribute to the loss of your professional liability coverage, the consultive malpractice service of the KSMA, and your privileges on active and courtesy hospital staffs. In addition, your subscription to the Journal of the KSMA will expire with the April issue. Loss of membership also signifies that you have withdrawn your support from organized medicine and its many programs of service to the patient and physician.

U. K. Library Receives Collection

A 4,300 volume collection of medical journals from the Wistar Institute of Anatomy and Physiology in Philadelphia has been acquired for the library at the University of Kentucky Albert B. Chandler, Medical Center, according to Alfred Brandon, head librarian.

Funds to guarantee procurement of the $32,000 collection were made available by William Arnold Hanger, Richmond, a director of the Kentucky Medical Foundation. According to Mr. Brandon, the collection will "give the fund a very firm foundation for its basic collection." He hopes to have 25,000 to 30,000 volumes in the library by the time classes begin in 1959.

Important Notice on Time

Since Lexington is on Central Daylight Saving Time, all sessions of the County Society Officers Conference on March 27 will be on that time. Physicians coming from parts of the state on Central Standard Time, are urged to make their plans accordingly, KSMA president Edward B. Mersch, M.D., said.

Ky., Va. Joint Surgical Session to Hear Dr. Patterson

"Recent Trends in the Surgery of Diverticulitis of the Sigmoid" is the title of the paper which will be presented by Howard Patterson, M.D., New York City, guest speaker at the joint meeting of the Kentucky Surgical Society and The Virginia Surgical Society at The Greenbrier, White Sulphur Springs, West Virginia, April 11-12.



Dr. Patterson

The Council of the Kentucky Surgical Society will meet Thursday evening, April 10, at the Greenbrier. Members of the council are: R. Arnold Griswold, M.D., Louisville, chairman; W. H. Pennington, M.D., and Francis M. Massic, M.D., both of Lexington. Ex-officio members are: R. W. Robertson, M.D., Paducah, president of the Society, and Doctor Bernhard. At present there are 140 members of the Society, including 21 senior fellows and 119 active members.

Kentuckians on the program and their subjects are:

John T. Bate, M.D., Louisville, "A Simple Manual Instrument for Use in Taking Split Thickness Skin Grafts"

Melvin L. Dean, M.D., Lexington, "Acute Cecitis"

James Drye, M.D., Louisville, "Cervical Cytology, results on 30,000 examinations"

J. Herman Mahaffey, M.D., Louisville, "Experiences with Surgical Treatment of Aneurysms of the Abdominal Aorta"

Laman A. Gray, M.D., Louisville, "The Conservative Surgical Operation for Pelvic Endometriosis"

William H. Hyden, M.D., Lexington, "Idiopathic Ulcerative Colitis: The Surgeon's Role"

Hugh B. Lynn, M.D., Louisville, "The Mechanism of Pyloric Stenosis, and Its Relationship to Preoperative Preparation"

Edward H. Ray, M.D., Lexington, "Hematuria";

Kearns R. Thompson, M.D., Lexington, "Fractures of the Os Calcis."

The names of Virginians participating in the two-day joint meeting were not available at press time, according to C. Melvin Bernhard, M.D., Louisville, secretary of the Kentucky Surgical Society.

Ford Grants $6 Million in Ky.

The Ford Foundation has given $6,118,276 for projects in Kentucky since its establishment in 1936, with most of the grants coming after 1950.

Hospital aid from the Foundation amounted to $2,972,700, with most of it going to 68 Kentucky voluntary, non-proift hospitals to help them to expand and improve their services. Largest single recipient is the University of Louisville which got $803,000 for faculty salary increases, and a $900,000 endowment to help strengthen the instruction program at the Medical School.

KAGP Annual Session, Apr. 23-25 To Feature 13 Speakers

The Seventh Annual Scientific Assembly of the Kentucky Academy of General Practice at the Brown Hotel in Louisville on April 23, 24, and 25 has scheduled a varied program of 13 speakers from throughout the country, according to Edgar B. Morgan, M.D., Louisville, chairman.

Speaker at this year's banquet on Thursday evening, April 24, will be the editor of the Journal of the AMA Austin Smith, M.D., of Chicago. He will discuss, "The Future of the General Practitioner."

There is no registration fee for the assembly, and advance registrations should be sent to: Mr. Clayton L. Scroggins, Executive Secretary, Kentucky Academy of General Practice, 141 West McMillan St. Cincinnati, 19, Ohio.

The Assembly program follows:

Wednesday Morning—April 23

"The General Practitioner's Relation to the Practice of Dentistry for Children," Pat H. Lyddan, D. D. S., Louisville

"Systemic Hypertension," James A. Campbell, M.D., Chicago, Illinois

"Office Treatment of Cardiac Disease," Arthur C. Kerkhof, M.D., Minneapolis, Minnesota

"The Role of the Family Physician in the Recognition and Management of Congenital Malformations," John Lester Reichert, M.D., Chicago, Illinois

Wednesday Afternoon—April 23

"Pulmonary Hypertension," James A. Campbell, M.D., Chicago, Illinois

"Electrocardiography in General Practice," Arthur Kerkhof, M.D., Minneapolis, Minn.

"Management of the Febrile Child," A. A. Mintz, M.D., Houston, Texas

"Diseases of the Pancreas," John Howard, M.D., Birmingham, Alabama

Thursday Morning—April 24

"The Allergic Manifestations and Treatment of the Deep Mycosis," Arthur C. Curtis, M.D., Ann Arbor, Michigan

"Bronchial Asthma," Charles F. Gershickter, M.D., Washington, D. C.

"Management of Hyperbilirubinemia in the Newborn," A. A. Mintz, M.D., Houston, Texas

"Dermatomyositis, Its Differentiation in Both Child and Adults," Arthur C. Curtis, M.D., Ann Arbor

Thursday Afternoon—April 24

"Breast Tumors," Charles F. Gerschickter, M.D., Washington, D. C.

"Changing Concepts in the Treatment of Peripheral Vascular Disease," Oscar Creech, Jr., M.D., New Orleans, La.

"General Problems of Malformations and Fetal Defects in Relation to Prenatal Care," George Tully, M.D., Albany, New York

"Endometriosis," Richard W. TeLinde, M.D., Baltimore, Md.

Thursday Evening—April 24

"The Future of the General Practitioner," Austin Smith, M.D., Chicago, Illinois

Friday Morning—April 25

"Carcinoma of the Colon," Harwell Wilson, M.D., Memphis

"Open Intracardiac Repair of the Atrial Septal," Oscar Creech, Jr., M.D., New Orleans

Subject to be Announced, Richard W. TeLinde, M.D., Baltimore

"Intestinal Obstruction in Infants and Children," Harwell Wilson, M.D., Memphis

U of L Med. Alumni Fund Drive to Start in April

A goal of $75,000—double the $36,740 contributed by 1,038 Medical School alumni during the record breaking 1957 drive—has been set for the 1958 Alumni Fund Campaign of the U of L School of Medicine.

Robert C. Long, M.D., Louisville, of the class of 1940, is in charge of solicitation in Jefferson County —where the goal is half of the $75,000. "Before we can expect our fellow alumni living outside Louisville to participate in generous giving," he said, "our own level of support must be raised considerably."

Assisting Doctor Long in the Jefferson County solicitation will be 50 class chairmen and five "key" assistants, Oscar Miller, M.D., '11; Charles Edelen, M.D., '26; William Pedigo, M.D., '38; Avrom Isaacs, M.D., '43; and Carroll Witten, M.D., '51.

There are approximately 600 alumni living in Jefferson County, 1,300 in the rest of the state and some 2,100 outside Kentucky. Personal solicitation will begin in Louisville immediately after Easter and will last for two weeks. Similar solicitation in 22 Kentucky cities having 10 or more physicians will take place during the latter part of April and early May.

Doctor Long expressed the belief that the three objectives of the Fund would appeal to all alumni. They are: (1) Funds for scholarships—a proposed $10,000 will be set aside for this purpose. Since the tuition at U of L is among the highest in the nation, many outstanding students are being lost to other schools. (2) Funds for unrestricted use—a proposed $20,000 to supplement teaching salaries. (3) Funds for the alumni endowment—all gifts over $30,000 will be placed in the alumni endowment fund.

New KSMA Members Listed

Five new members have been added to the roster of the KSMA since the last listing in the Journal. They are:

Helen B. Fraser, M.D., Louisville
William W. Johnson, M.D., Louisville
Robert A. Magallon, M.D., Louisville
Elizabeth Pederson, M.D., Berea
Kingman G. Seiler, M.D., Elkton

A Correction

Through an oversight, a figure in the "Public Health Page" for February, 1958 was printed incorrectly. In paragraph three of "Present Status of Serologic Tests for Syphilis" on page 116, the third sentence should read, "An example of the greater specificity of the VDRL test has been shown in 130 non-syphilitic seronegative volunteer prisoners. . . ." rather than "in 13" as appeared in the Journal.

Opportunities for Postgraduate Medical Education in Kentucky April through December 1958

Prepared by the KSMA Committee on Postgraduate Medical Education

As a service to Kentucky physicians interested in postgraduate education, the Journal is printing a list of postgraduate opportunities available in the state from April through December of 1958.

The following listing, is a project of the KSMA Committee on Postgraduate Medical Education headed by Walter Coe, M.D., Louisville. As additions are made to the current listing, they will be included in forthcoming issues of the Journal.

April

3 Harrodsburg Seminar—Beaumont Inn—afternoon (starting at 2:30 p.m.) and evening

10 Kentucky Pediatric Society—Amphitheater, Children's Hospital, Louisville, 3 to 5 p.m.

11-12 Kentucky Surgical Society-Virginia Surgical Society Joint Meeting—The Greenbrier, White Sulphur Springs, West Virginia

15 Pediatric Postgraduate Course — Children's Hospital, Louisville—every Tuesday through June 3—9:30 a.m. to 12:30 p.m.

17 Joint 13th Councilor District and District Four State TB Hospital, Ashland scientific program —morning session—District Four State TB Hospital—9:30 to 12 noon—afternoon session, Henry Clay Hotel, 2 to 4 p.m.—evening session, Henry Clay Hotel, 5:30 to 8 p.m.

22-25 Ky. Academy of General Practice Scientific Assembly—Brown Hotel—Louisville
TB Meeting—Ashland*

May

Pediatric Postgraduate Course—every Tuesday through June 3—Children's Hospital, Louisville—9:30 to 12:30 p.m.

7 Second Councilor District Scientific Program and Meeting, Owensboro

8 Joint Meeting of 1st and 3rd Councilor Districts, Scientific Program and Meeting—Kenlake Hotel, Hardin—afternoon and evening 3 p.m. to 9:30 p.m.

16-17 Kentucky Chapter, American College of Surgeons, Annual Meeting, Brown Hotel, Louisville
TB Meeting—Glasgow*

June

3 Pediatric Postgraduate Course—final session—Children's Hospital, Louisville—9:30 a.m. to 12:30 p.m.

12 Joint meeting of the Fourth and Sixth Councilor Districts—Scientific Program—afternoon and evening session starting at 3:30 p.m.—Mammoth Cave Hotel

18 Fourteenth Councilor District Scientific Program—Hazard

19 Twelfth and Fifteenth Councilor Districts Meeting—Cumberland Falls—afternoon and evening, 3 to 8 p.m.

July

10 Kenlake Seminar—Kentucky Lake State Park —afternoon and evening—Kentucky Academy of General Practice
TB Meeting—London*

August

(no knowledge of any meetings scheduled)

September

23-24-25 KSMA Annual Meeting — Columbia Auditorium, Louisville—Tuesday, Wednesday, and Thursday

October

9 Big Sandy Seminar—Kentucky Academy of General Practice, Paintsville Country Club—2 p.m.

16 Joint meeting of the 1st, 2nd, and 3rd Councilor Districts and District One State TB Hospital—Madisonville—morning, afternoon and evening sessions starting at 10 a.m.

18 Joint meeting of the Ky. Chapter and the Tennessee Chapter of the American College of Physicians—Brown Hotel—Louisville

22-23 Annual Fall Clinical Conference—New Clinic Building—Lexington Wednesday—2 p.m. to 5 p.m., Thursday—9 a.m. to 5 p.m.
TB Meeting—Louisville*

November

6 "Symposium on Recent Advances in Medicine," Mirror Room, Kentucky Hotel, Louisville, 9 a.m. to 6 p.m. Thursday, sponsored by the Kentucky Academy of General Practice

28 Caribbean Cruise and Postgraduate Course sponsored by the Ky. Academy of General Practice—November 28 to December 8.
TB Meeting—Paris Hospital*

December

Caribbean Cruise and Postgraduate Course sponsored by the Kentucky Academy of General Practice, November 28 to December 8

3 John N. Norton Memorial Infirmary Seminar —Norton Infirmary—Third and Oak Streets, Louisville—10 a.m. to 5 p.m.

*Dates to be announced at a later date by the TB Commission

Programs of the University of Louisville School of Medicine

(monthly or weekly)

Monday

1. Surgical Grand Rounds—Rankin Amphitheater, LGH, 4 p.m.
2. Urological Conference—3rd Monday—Surgical Conference Room—LGH—4 p.m.

Tuesday

1. Pediatric Case Conference Children's Hospital Amphitheater, 11 a.m. (10:30 a.m. April 15 through June 3) During school session only
2. Medical Conference (Hematology, Cardiology, Endocrinology, and Gastroenterology, alternating) Rankin Amphitheater LGH, 4 p.m.
3. Orthopedic Case Review, Surgical Conference Room, LGH, 4 p.m.
4. Psychiatric Case Conference, 6th Floor East, Norton Memorial Infirmary, 11 a.m.

Wednesday

1. Gastroenterology Interservice Conference, Medical Conference Room, LGH—12:30 p.m.

Thursday

1. Clinical Pathological Conference, Rankin Amphitheater LGH—12 noon (during school session only)
2. Urological Conference, Surgical Conference Room, LGH—4 p.m.

Friday

1. Pediatric Staff Conference, Children's Hospital —Amphitheater— 8 a.m.
2. Psychiatric Case Conference—Child Guidance Clinic, 206 East Chestnut St., Louisville—8:30 a.m.

Saturday

1. Obstetrical Staff Conference—Out-patient class room, second floor, LGH—8 a.m.
2. Surgical Staff Conference — Rankin Amphitheater, LGH—8 a.m.
3. Medical Staff Conference—Rankin Amphitheater, LGH—9 a.m.
4. Gynecology Ward Rounds—LGH—9 a.m.
5. Pediatric Newborn Conference—Pediatric Out-Patient Department, LGH—9:30 a.m.

KSMA to Cooperate in Observance of Med. Education Week

All KSMA members are urged to cooperate in the third annual observance of Medical Education Week, April 20-26, by helping to bring the progress, aims and problems of medical education to the attention of the public, according to Edward B. Mersch, M.D., Covington, KSMA president.

A joint effort of the American Medical Association, the Association of American Medical Colleges, the American Medical Education Foundation, the National Fund for Medical Education, the Student AMA, the AMA Woman's Auxiliary, the week will highlight the challenges and problems confronting medical education today.

During the week, the comprehensive role of medical schools in education, research, and service, and the continuing need for facilities, personnel and financing to further medical knowledge will be stressed.

There are currently 83 approved medical schools in the U. S., with an enrollment of 29,003 students.

Tri-city Ob. Gyn. Society Meets in Louisville March 26

The meeting of the Tri-city Obstetrical and Gynecological Society in Louisville on March 26 will headline Michael L. Leventhal, M.D., Chicago, noted for his work on the Stein-Leventhal Syndrome, as guest speaker, according to Robert C. Long, M.D., president of the Louisville group.

Composed of obstetricians and gynecologists from Louisville, Indianapolis, and Cincinnati, the Society will hold sessions in the Rankin Amphitheater of General Hospital starting with registration at 9:45 a.m. All interested KSMA members are invited to attend.

Louisville physicians participating are: Katharine Dodd, "Neonatal Problems"; William Christophersen, "Vaginal Cytology"; Robert C. Long, "Problems of Cytology"; Harold Kleinert, "Demonstration of Cardiac Arrest in the Dog"; Robert Bergner, "Discussion: Cardiac Arrest." Douglas Haynes, M.D., Louisville, will take part in a case report and discussion on "Neglected Transverse Presentations with Complications."

A panel on "Management of Adnexal Lesions" will be moderated by Laman Gray, Louisville, and will include W. O. Johnson, Louisville, and Doctor Leventhal. At the dinner meeting at 7 p.m., Doctor Leventhal, attending obstetrician and gynecologist at Michael Reese Hospital in Chicago, will speak on "Bilateral Polycystic Ovaries: The Stein Leventhal Syndrome."

Course in PG Pediatrics Starts April 15 at Children's

An eight-week Pediatric Postgraduate Course will start on April 15 at Children's Hospital in Louisville, according to Walter Coe, M.D., chairman of the KSMA Committee on Postgraduate Education.

The course, which will be given on Tuesdays under the direction of Alex J. Steigman, M.D., chairman of the Department of Pediatrics at Children's, is sponsored by the KSMA with the U of L School of Medicine and the Kentucky Chapter, American Academy of Pediatrics.

Scientific presentations in the course include:

APRIL 15—"Obstructive Uropathies," W. C. Adams, M.D., and "Office Evaluation of Cardiac

Murmurs," J. A. Little, M.D.

APRIL 22 — "Practical Approach to Fluid Therapy," Katharine Dodd, M.D., and "Value of Well Baby Clinic," Fe Dizon, M.D.

APRIL 29—"Pediatric Diagnostrix," J. A. Little, M.D., and "Allergy in Childhood," A. J. Steigman.

MAY 6—"Hernias and Cryptorchidism," H. B. Lynn, M.D., and W. W. Johnson, M.D.; "The T&A Problem," Gordon Green, M.D., and "Foot Problems in Children," S. P. Auerbach, M.D.

MAY 13—"The Problem of 'Low Grade Fever'," W. C. Adams, M.D., and "Adolescence," Frank Falkner, M.D.

MAY 20—"Jaundice in the Newborn," J. A. Little, M.D., and "Emotional Disorders Associated with Physical Disease," H. M. Gray, M.D.

MAY 27—"Growth Problems," Frank Falkner, M.D., and "Intelligent Use of Laboratory," Katharine Dodd, M.D.

JUNE 3—"Drug Therapy," Alex J. Steigman, M.D.

Each session will be scheduled to run from 9:30 a.m. to 12:30 and will include a conference period and coffee break.

Ground Broken for New Building of Blue Cross-Shield

Ground breaking ceremonies for the new Blue Cross-Blue Shield office building were held Monday, January 27, at the northeast corner of the Watterson Expressway and Bardstown Road where the building will be erected.

Representatives of the KSMA, hospitals, Blue Cross-Blue Shield Boards, Chambers of Commerce, and the general public gathered at the site to watch J. Duffy Hancock, M.D., president of the Kentucky Physicians Mutual, and J. P. Miller, president of the Kentucky Blue Cross Board, turn earth to symbolize the beginning of the project.

D. Lane Tynes, director of the Blue Cross-Blue Shield of Kentucky who was in charge of the ceremonies, stated that money that would otherwise have been used for rental of required office space should pay for the building in ten years. He said, "The new building will permit greater economy and efficiency of operation in serving the thousands of Blue Cross-Blue Shield members in Kentucky."

Ky. Pediatric Society Meets in Louisville, April 10

Edith M. Lincoln, M.D., a noted pediatrician from New York, will address the Kentucky Pediatric Society during its annual meeting in Louisville on Thursday, April 10, according to Kenneth P. Crawford, M.D., Louisville, secretary.

Doctor Lincoln, who will address the group in the amphitheater of Children's Hospital at 4:00 p.m., is chief of the Children's Chest Clinic, Bellevue Hospital; consultant in pediatrics, Roosevelt Hospital; and professor of clinical pediatrics, New York University. She will discuss tuberculosis in childhood.

Her talk will be preceded by case presentations from 3 to 4 p.m. Following the scientific sessions the Society will conduct its annual business meeting.



Participating in the ground breaking ceremonies for the new Blue Cross-Blue Shield building in Louisville were—(left to right)—D. Lane Tynes, director of Blue Cross-Blue Shield of Kentucky; J. P. Miller, president of the Blue Cross Board; and J. Duffy Hancock, M.D., president of the Blue Shield Board.

A cocktail hour, followed by dinner at 7 p.m., will be held at the Pendennis Club. Members who wish to bring guests should make arrangements by writing Kenneth P. Crawford, M.D., secretary, 163 Medical Arts Building, Louisville 17, Ky.

Other officers of the society are: Owen Ogden, M.D., Louisville, president, and Robert McLeod, M.D., Somerset, vice president.

AAGP to Meet in Dallas, Texas on March 24-27

Current questions facing the family doctor will be discussed by 35 physicians at the tenth annual scientific assembly of the American Academy of General Practice in Dallas Memorial Auditorium, Dallas, Texas, March 24-27.

Seven thousand physicians are expected to attend the meeting which will include 90 scientific exhibits and 300 technical exhibits. The scientific assembly will be presented by the AAGP in combination with the Dallas Southern Clinical Society, according to Academy President Malcom E. Phelps, M.D., El Reno, California.

The Congress of Delegates, policy-making body of the Academy, will convene at the Statler Hilton in Dallas on March 22. The president's reception and dance will take place there on March 26. Holland T. Jackson, M.D., Fort Worth, Texas, president-elect, will receive the gavel from President Phelps at a ceremony preceding the reception.

Kentucky's delegates to the AAGP Congress are Frank L. Duncan, M.D., Monticello, and Carroll L. Witten, M.D., Louisville. Alternate delegates are Samuel D. Taylor, M.D., Henderson, and Melvin J. Weber, M.D., Ludlow.

EFFECTIVE, DEPENDABLE THERAPY FOR VAGINITIS



Floraquin® eliminates trichomonal and mycotic infection; restores normal vaginal acidity

Leukorrhea is by far the most frequent symptom of vaginitis; trichomonads and monilia are the most common causes. Many authors have reported[2] trichomonal protozoa in the vagina of 25 per cent of obstetric and gynecologic patients. Increased use of broad spectrum antibiotics has resulted in a sharp rise in the incidence of monilial infections.

Floraquin effectively eradicates both trichomonal and monilial vaginal infections through the action of its Diodoquin® content. Floraquin also furnishes boric acid and sugar to restore the normal vaginal acidity which inhibits pathogens and favors the growth of protective Döderlein bacilli.

Pitt[1] recommends vaginal insufflation of Floraquin powder daily for three to five days, followed by acid douches and the daily insertion of Floraquin vaginal tablets throughout one or two menstrual cycles. G. D. Searle & Co., Chicago 80, Illinois. Research in the Service of Medicine.

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1. Pitt, M. B.: Leukorrhea. Causes and Management, J. M. A. Alabama *25*:182 (Feb.) 1956.
2. Parker, R. T.; Jones, C. P., and Thomas, W. L.: Pruritus Vulvae, North Carolina M. J. *16*:570 (Dec.) 1955.

SEARLE

Senior Day Program, April 21 To Feature Dr. Orr

Designed to assist this year's graduates of the University of Louisville School of Medicine in making the transition from students to practicing physicians, the Senior Day program on April 21 will feature Louis M. Orr, M.D., vice speaker of the AMA House of Delegates, as dinner speaker.



Dr. Orr

Throughout the day the students will have an opportunity to hear leading Kentucky physicians discuss the mechanics and economics of setting up a practice and the importance of the "human equation" in practice, according to Richard Elliott, M.D., Lexington, KSMA Senior Day Chairman.

At the noon session held in the Rankin Amphitheater of General Hospital, Edward B. Mersch, M.D., Covington, will address the students in a speech entitled, "It's Not You Alone." The afternoon session will be in the South Room of the Brown Hotel.

The Jefferson County Medical Society will be host at the dinner, with individual members of the Society serving as hosts to individual members of the class. Mrs. J. Andrew Bowen, president of the KSMA Woman's Auxiliary, is in charge of a program for the wives and sweethearts of students attending. The day is sponsored by the KSMA with the cooperation of the Jefferson County Medical Society and the U of L School of Medicine.

Med. Seniors Tour N. Y. Hospitals

Seven seniors from the University of Louisville School of Medicine are broadening their education by a month's tour of New Yor City hospitals. Morris Weiss, Jr., and Paul Grider spent January at Memorial Hospital. Five others have gone or will go to St. Luke's Hospital affiliated with Columbia University's Medical School. They are: H. Clarke Henderson, who goes in April; E. Truman Mays, February; Arnold Belker, March; and William Johnson and Charles Severs who went in October. All work on medical service in the hospitals where they live and pay their own travel costs.

Committee Members Named

Russell E. Teague, M.D., Louisville, State Health Commissioner, was appointed a member of the Kentucky Advisory Committee on Nuclear Energy by Governor A. B. Chandler. The Governor also reappointed Hal Thurmond, Hopkinsville, and Mrs. M. M. Harrison, Louisville, as members of the Advisory Council on Mental Health for terms to expire June 30, 1961.

STUDENT AMA

This year the annual Student AMA Lecture has been scheduled for March 10 in the Rankin Amphitheater of the Louisville General Hospital at 12 noon. The lecturer will be Robert W. Wissler, Ph. D, M. D., who will speak on "The Contribution of Resistant Species to the Study of Experimental Atherosclerosis."

Doctor Wissler has recently been appointed professor and chairman of the department of pathology at the University of Chicago. He has made a significant contribution to the study of atherosclerosis, and we are pleased and proud to have him as our guest.

We hope that KSMA members interested in attending this lecture, will feel free to do so.

« « «

Officers of the local chapter of Student AMA have been invited to attend the County Society Officers Conference. The conference is an all day session and luncheon to be held on March 27 in Lexington.

I would like to express our appreciation for this offer. We are looking forward to this occasion, as it promises the opportunity for students to participate in organized medicine.

Clarke Anderson, President
U of L Chapter, Student AMA

"Kentucky Day" to be Celebrated at World's Fair in Brussels

"Kentucky Day" at the World's Fair in Brussels, Belgium, has been tentatively scheduled for July 17, according to E. R. Mitchell, Covington, president of the Kentucky Chamber of Commerce.

Kentucky products will be on display that day and a special luncheon and reception will be given by the Brussels Chamber of Commerce. At press time, there were no plans for other states to be so recognized at the fair, which will run from April 17 through October 19, although a few cities were planning similar programs.

An official delegation from Kentucky is scheduled to visit the continent and attend the fair on "Kentucky Day." The fair is the first World's Fair since 1939. KSMA members are invited to participate.

Maternal, Child Care Group Meets

Kentucky will be represented at the second regional meeting of the Committee on Maternal and Child Care of the AMA's Council on Medical Service in Chicago on March 22-23. Twelve states will have representatives at the meeting which will include discussion of terms and definitions used in perinatal mortality studies, organization and operation of such studies, and classification of causes of perinatal deaths.

KSMA Has File of Locum Tenens

The Headquarters Office of the Kentucky State Medical Association has a file of physicians interested in finding locum tenens in Kentucky. Any KSMA member desiring information on someone who would be willing to take over his practice while he is on vacation should contact the KSMA office for possible helpful information.

Joint Commission Covers Diet and Emergency Treatment*

This month the Journal is giving a resumé of the standards necessary in the dietary department and the emergency room of a hospital for accreditation by the Joint Commission on Accreditation of Hospitals. These qualifications, along with those expected in the Pharmacy Room and the role of the Hospital Therapeutics Committee were contained in the December *Bulletin* of the Joint Commission.

Dietary Room

Standards listed for the dietary room are: (1) It shall be directed by qualified personnel and integrated with other departments of the hospital, (2) Facilities shall meet the requirement of the local sanitary code for storage, preparation, and for general dietary needs of the hospital—including special diets, (3) There shall be a qualified dietician (preferably ADA registered) on a full time or consultative basis, and additional administrative and technical personnel, (4) There shall be a systematic record of diets, correlated with the medical records, (5) Departmental and interdepartmental conferences shall be held periodically. In every instance, specific local laws and ordinances shall be obeyed.

Most common faults noted by surveyors of dietary rooms are: lack of thermometers and temperature controls in large refrigerators and on dishwashing apparatus, poor and unsanitary garbage control and disposal, storage of uncovered food in the same refrigerator with drugs, failure to clean the ice storage bins, and presence of unimaginative, unpalatable, repetitious stereotyped special diets.

Emergency Room

According to the *Bulletin,* an emergency room should be maintained in all hospitals, except some very specialized ones. It should: (1) Be well organized, directed by qualified personnel and integrated with other departments of the hospital, (2) Facilities shall assure prompt diagnosis and emergency treatment, (3) Adequate medical records shall be kept on every patient, (4) Adequate medical and nursing personnel shall be available at all times, (5) There shall be a written plan for mass casualties, coordinated with the in-patient and out-patient services of the hospital.

The importance of a physician always seeing the patient in the emergency room and the nurse not treating or prescribing for patients herself, were stressed. The *Bulletin* also stated that the plan for care of mass casualties should be rehearsed at least once yearly.

**The February issue of the Journal of the KSMA covered the accreditation standards of the Pharmacy Room and the Therapeutics Committee.*

Health Information Foundation Reports on Eighth Year

The Progress Report of the Health Information Foundation for 1957, the foundation's eighth year, covers four aspects of research in process during the year, George Bugbee, President, has announced.

First to be reported on is "A Study of Family Health Care and Spending Patterns," conducted under the direction of H. Ashley Weeks, Ph. D., University of Michigan School of Business Administration. It was undertaken to develop some hypothesis of why people spend their incomes in the ways they do and to determine how they provide for family health care.

To find out how the health needs of the aged may be met by voluntary health insurance, the Foundation is sponsoring "A Study of the Aging in the U. S.," under the direction of Ethel Shanas, Ph. D., National Opinion Research Center, University of Chicago.

Through a grant to the University of Michigan, the Foundation sponsored "A Study of the Windsor Medical Services, Inc." Under the direction of Nathan Sinai, Dr. P.H., the study was aimed at discovering how a broader range of medical services than covered by most existing types of insurance programs had been publicly available for 20 years in a plan acceptable to patients and doctors alike. A final report will be published in 1958 by the Harvard University Press.

To pinpoint the dramatic advances in medical care made in the past two decades, the foundation undertook "The Harvard-Beth Israel Hospital Study" —a comparison of a typical general hospital population in 1932 and 1952. Cecil G. Sheps, M.D., Director, Beth Israel Hospital is project director.

New AMA Transcription Series Ready for Local Use

A new transcription series, "Health Magazine of the Air," aimed at giving our community a monthly report on the newest and best in medicine, has been introduced by the AMA.

The new 15-minute series features H. V. Kaltenborn, veteran newscaster, and W. W. Bauer, M.D., AMA's Bureau of Health Education Director. Seasonal health spot announcements will be presented on the reverse side of the platters. These spots will be given by popular movie personalities who contribute their time as a public service.

KSMA is currently providing transcriptions to about 35 Kentucky stations and the new series is scheduled to start this month.

Trip to Hawaii is Planned

A trip to the Hawaiian Islands, sponsored by the Illinois State Medical Society, is being planned in connection with the annual meeting of the American Medical Association in San Francisco in June.

All interested physicians and their families are invited to participate in the party which will leave by air from San Francisco the night of June 26 and arrive in Honolulu the following morning. Participants in the tour will leave Honolulu July 5 and have a choice of returning by air or on the S. S. Lurine. Complete information may be obtained from: W. M. Moloney, Harvey T. Mason Travel Co., Professional Building, "Old Orchard," Skokie, Illinois.

Application

FOR SPACE IN THE SCIENTIFIC EXHIBIT

1958 Annual Meeting — Kentucky State Medical Association

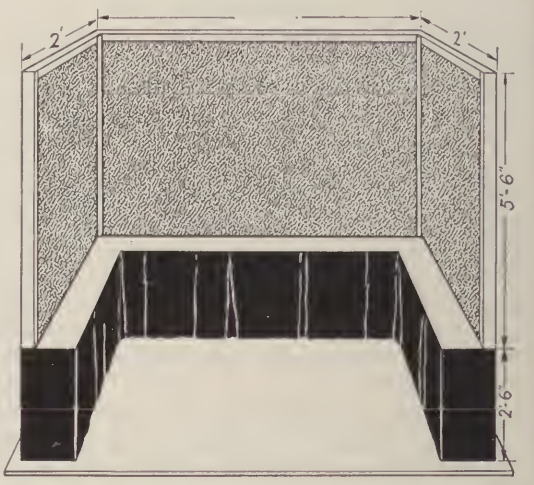
Columbia Auditorium — **Louisville, Kentucky** — **September 23, 24, 25**

Fill Out and Mail to:

EVERETT L. PIRKEY, M.D., Chairman
Committee on Scientific Exhibits
Louisville General Hospital,
Louisville 2, Kentucky

Applications for space should be received before July 1, 1958

Dimensions and structure of K.S.M.A. Scientific booth are shown in accompanying illustration



1. Title of Exhibit: .....

2. Description or nature of exhibit: (Attach brief description to this blank).

3. Will you require shelf space? .....

4. Give approximate amount of wall space needed. (Included in total space is two side walls of two feet in length) .....

5. Name of institution co-operating in the exhibit (if desired) .....

6. Name of exhibitor: .....

..... (Street & No.) ..... (City)

The Kentucky State Medical Association will provide without cost to the exhibitor the following: Exhibit space, shelves, sign for booth, current, bracket lights, provided all items are approved in advance by the committee.

Cost of transporting exhibits to the meeting must be borne by the individual exhibitor as well as costs of cards, signs, etc., which are a part of the exhibit.

View boxes, furniture, decorations, etc., may be rented, if desired, by applying directly to Jos. T. Griffin Company, 704 West Main Street, Louisville 2, who supply equipment for the annual K.S.M.A. meeting.



To cut daytime lethargy

(and keep rauwolfia potency)

in treatment of hypertension:

Mounting clinical evidence confirms the view that HARMONYL produces much less lethargy while reducing blood pressure effectively. In the most recent study[1], HARMONYL was evaluated in comparison with reserpine and other rauwolfia alkaloids. HARMONYL *was the only alkaloid which produced a hypotensive response closely matching that of reserpine, coupled with a greatly reduced rate of lethargy.* Only one HARMONYL patient in 20 showed lethargy, while an average of 11 out of 20 showed lethargy with reserpine, and 10 out of 20 with the alseroxylon fraction. Abbott

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(DESERPIDINE, ABBOTT)

while the drug works effectively . . . so does the patient

1. Comparative Effects of Various Rauwolfia Alkaloids in Hypertension; *Diseases of the Chest;* in press.

*TRADEMARK



in anxiety and hypertension
NEW *fast-acting*

filmtab® Harmonyl-N*

(Harmonyl* and Nembutal®)

Calmer days, more restful nights starting *first* day of treatment, through synergistic action of HARMONYL (Deserpidine, Abbott) and NEMBUTAL (Pentobarbital, Abbott). Lower therapeutic doses, lower incidence of side effects. Each HARMONYL-N Filmtab contains 30 mg. NEMBUTAL Calcium and 0.25 mg. HARMONYL. Each HARMONYL-N *Half-Strength* Filmtab combines 15 mg. NEMBUTAL Calcium and 0.1 mg. HARMONYL. Abbott

®Filmtab—Film-sealed labiels, Abbott; pat. applied for

801060 *Trademark

March is Red Cross Month

The Red Cross Fund Campaign opened in Louisville on March 5 and was scheduled to get underway throughout the state later this month, according to Glenn Lively, director of public information of the Louisville chapter, who urged Kentuckians to give generously.

Increased support is needed this year because: unprecedented disasters in the past two years have wiped out disaster reserves, growing population has multiplied demands on all Red Cross Services, especially the Blood Program, and inflation has resulted in rising costs.

U of L Pledges Interest in Fund Formed in Hagans' Memory

"The University pledges the sincere interest of its administrative officers and the School of Medicine in achieving the utmost with this memorial in uncovering new knowledge in the field of surgery," said Doctor Philip Davidson, president of the University of Louisville commenting on the William H. and Norma Perkins Hagan Surgical Research Fund.

An organizing committee and more than 300 friends voluntarily set up the Fund in memory of the Hagans, who lost their lives in a mid-Pacific air crash on November 8. Initial funds of $12,000 have already been received and will be held inviolate in the formation of a capital endowment trust, according to Doctor Davidson.

Investment of the Fund will be perpetually supervised by the Board of Trustees and will be coinvested. Disbursement of the income from the Fund will be by a small committee within the department of surgery headed by the professor and head of the department. Five per cent of the annual income will be returned to the principal, to assure continuing growth of the memorial.

IN THE BOOKS

(Continuted from Page 220)

festations that lead eventually to trouble are frankly discussed. The case histories are well handled and make enjoyable reading.

Periodic health examinations by physicians capable of doing a complete one are a MUST. The health maintenance program with plenty of hobbies is of key importance. Dr. Page is particularly hard on the individual who procrastinates about his health, who fails to have check-ups at regular intervals or report danger signs.

The plan for retirment, the early age at which one should consider such a period, will start many persons to stop, reflect and digest. I can think of no one who would not be benefited by reading this book, and that applies to physicians, patients with health problems in their family and especially business executives who, in many instances, are paying much more attention to their ledgers than to their health. This book is indeed a fine complement to an essay written many years ago by Sir William Osler entitled "A Way of Life."

Morris Flexner, M.D.

Grace Marilyn James, M.D., Louisville, was named "Woman of the Year" in the field of public health by the Louisville *Defender*. A Diplomat of the American Board of Pediatrics and a member of the Kentucky Chapter, American Academy of Pediatrics, Doctor James is an instructor in pediatrics at Louisville General Hospital and an active staff member of Children's and Red Cross hospitals in Louisville.

relaxes both mind & muscle

without impairing mental or physical efficiency





well tolerated, relatively nontoxic / no blood dyscrasias, liver toxicity, Parkinson-like syndrome or nasal stuffiness / well suited for prolonged therapy

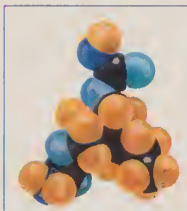
Supplied: 400 mg. scored tablets, 200 mg. sugar-coated tablets. *Usual dosage:* One or two 400 mg. tablets t.i.d.

For anxiety, tension and muscle spasm in everyday practice.

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tranquilizer with muscle-relaxant action

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WALLACE LABORATORIES

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Anxiety of pregnancy

'Miltown' therapy resulted in complete relief from symptoms in 88% of pregnant women complaining of insomnia, anxiety, and emotional upsets.*

'Miltown' (usual dosage: 400 mg. q.i.d.) *relaxes* <u>*both*</u> *mind and muscle* and alleviates somatic symptoms of anxiety, tension, and fear.

'Miltown' therapy does not affect the autonomic nervous system and *can be used with safety throughout pregnancy.**

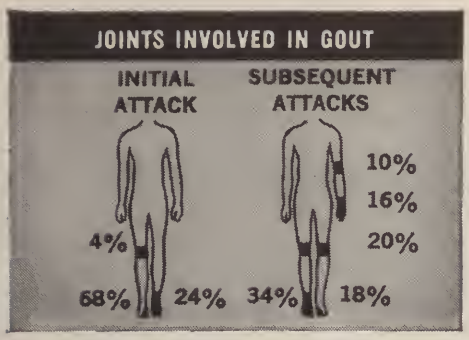
*Belafsky, H. A., Breslow, S. and Shangold, J. E.: Meprobamate in pregnancy. Obst. & Gynec. 9:703, June 1957.

Miltown®



THE ORIGINAL MEPROBAMATE
DISCOVERED & INTRODUCED BY
WALLACE LABORATORIES
NEW BRUNSWICK, NEW JERSEY

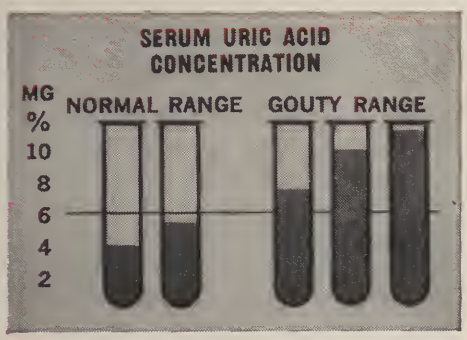
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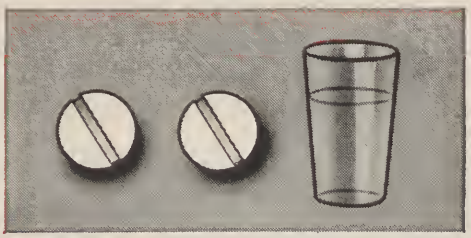
1. Recurrent joint pain followed by long periods of complete remission. *(Percentages refer to incidence.)*



2. Enlargement of bursae such as in this case involving the olecranon bursa.



3. Elevated serum uric acid levels.



4. Colchicine test: full dose (0.5 mg.) every 1 to 2 hours until pain is relieved or nausea, vomiting or diarrhea occur. The test requires usually 8 to 16 doses. Pain relief is highly indicative of gout.

FROM THESE FINDINGS...SUSPECT GOUT:

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A SPECIFIC FOR GOUT

Once findings point to gout, long-term management can be started with BENEMID. This effective uricosuric agent has these unique benefits:

- Urinary excretion of uric acid is approximately doubled.
- Serum uric acid levels are reduced.
- Uric acid deposits (tophi) in tissues are mobilized.
- Formation of new tophi can often be prevented.
- Fewer attacks and severity is reduced.

RECOMMENDED DOSAGE: 0.25 Gm. (½ tablet) twice daily for one week followed by 1 Gm. (2 tablets) daily in divided doses.

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In Memoriam

J. W. ACTON, M.D.
Glasgow
1871-1958

John Wesley Acton, M.D., Glasgow, died at Samson Community Hospital on January 25 after an illness of five years.

He was born in Lincoln County, and after his graduation from the Kentucky School of Medicine in 1897, he practiced in Barren and surrounding counties for 56 years.

ALFRED M. BERG, M.D.
Louisville
1922 - 1958

Alfred M. Berg, M.D., a native of Brooklyn who had lived in Louisville since 1938, died at Jewish Hospital on January 25.

He had been a practicing surgeon since 1955, was a fellow of the American College of Surgeons, a member of the Louisville Surgical Society, and was on the surgical faculty of the U. of L. He graduated from the University of Louisville in 1945 and served as an Army captain in World War II and the Korean War.

HARRY S. FRAZIER, M.D.
Louisville
1901-1958

Harry S. Frazier, M.D., a native of Louisville, died at St. Joseph Infirmary on February 8. He was on the staffs of the Norton Memorial and St. Joseph infirmaries and had practiced medicine in Louisville since 1928.

Dotor Frazier graduated from the University of Louisville School of Medicine in 1926 and was an associate professor of medicine there. He did graduate work at the New York Postgraduate Medical School and Hospital in 1926-27.

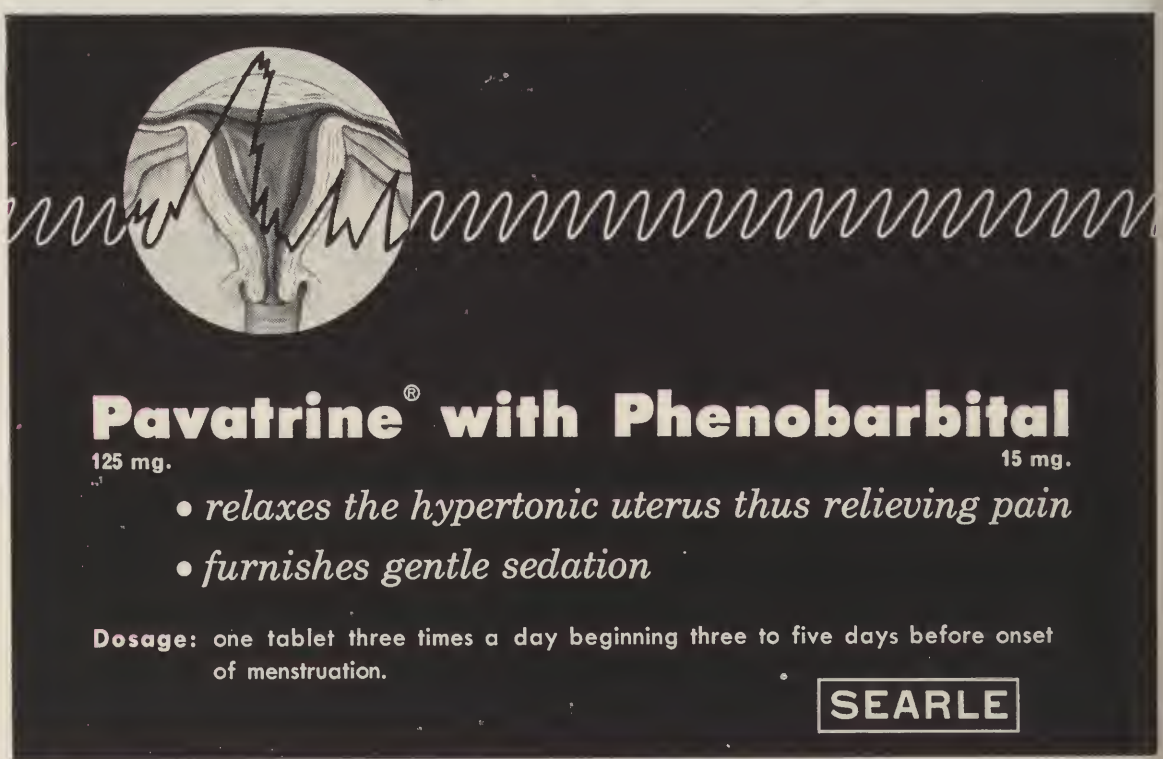
WILLIAM S. REEVES, M.D.
Hillsboro
1865 - 1958

William S. Reeves, M.D., Fleming County's oldest physician, died at his home in Hillsboro after an illness of 10 days on January 23.

A native of Fleming County, Doctor Reeves had practiced actively until a few months ago. He graduated from the old University of Louisville School of Medicine in 1891 and had practiced in Bath County for 20 years and in Fleming for 46. He was honored at a special "Dr. Reeves Day Program" sponsored by the Flemingsburg Lions Club and attended by 500 in October of 1955.

(Continued on Page 285)

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Pavatrine® with Phenobarbital

125 mg. 15 mg.

- *relaxes the hypertonic uterus thus relieving pain*
- *furnishes gentle sedation*

Dosage: one tablet three times a day beginning three to five days before onset of menstruation.

SEARLE

IN MEMORIAM

(Continued from Page 284)

J. W. CROOK, M.D.
London
1876-1958

A practicing physician for more than half a century and president of two financial institutions, J. W. Crook, M.D., London, died from a heart ailment on January 26.

Doctor Crook, a graduate of the Hospital College of Medicine in 1907, was a native of Knox County. He was president of the National Bank of London and had been the only president of the London Federal Savings and Loan Association since its establishment 25 years ago.

NEWS ITEMS

Herbert A. Moskovitz, M.D., has opened an office in Louisville for the practice of internal medicine. He is a graduate of Emory University School of Medicine in 1954, interned at the New England Medical Center in Boston and took his residency training at Grady Memorial Hospital in Atlanta.

William E. Becknell's, M.D., dairy barn and poultry house in Beattyville burned early Saturday morning, January 25. Damage on his farm (known as the Herndon farm) was estimated at $30,000 or more. Besides the buildings about 4500 chickens and feed and equipment were burned.

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See me at (address).....on (date).....at (hour).....

Doctor.....

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( ) **Financial Records and Reports**
( ) **Professional Management Service**
( ) **Long-Term Financial Planning**
( ) **Tax Returns**
( ) **Other:**
( ) **Centralized Bookkeeping** (Statements to Patients)
( ) **Pre-Collection Program**
( ) **Partnership Formation**
( ) **Sale of Practice**
( ) **Collections**

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WANT A LARGE MEDICAL PRACTICE IN A NEW DOCTORS' BUILDING?

(In Somerset, Kentucky)

NOW RENTING—Six new office suites in our DOCTORS' BUILDING, directly across the street from the Somerset City Hospital, to the following doctors desiring large paying practices: eye, ear, nose and throat, pediatrician; obstetrician-gynecologist, surgeon, general doctors, and one dentist. This location offers the chance of a lifetime for some doctor coming out of school or service.

FACILITIES OFFERED—Each doctor will have his own waiting room, with public and private entrances, secretary's office, doctor's office, three examining rooms, test and sterilization room, storage, public and private toilets. Somerset City Hospital, with the new addition, is rated as 100 beds. The population of the town and suburbs is 15,000. The hospital serves a five county area. Somerset is a fine place to live. It adjoins Lake Cumberland which has excellent recreational facilities.

For further information contact C. K. Cundiff, Owner, Somerset, Ky. Phone 1229.

County Society Reports

Pike

At a meeting of the Pike County Medical Society, W. C. Hambley, M.D., Pikeville, was elected president and W. F. Clarke, M.D., Pikeville, was chosen secretary.

Nelson

Charles B. Spalding, M.D., Bardstown, was elected president of the Nelson County Medical Society at a meeting in January. He was also elected president of the medical staff of Flaget Memorial Hospital.

Other officers of both organizations are: J. J. Sonne, M.D., Bardstown, vice president, and A. D. Steeley, M.D., Bardstown, secretary-treasurer. Doctor Spalding succeeds T. G. Forsee, who served as president of both organizations last year.

Barren

John Dickinson, M.D., Glasgow, was elected president of the Barren County Medical Society at a meeting in the Samson Community Hospital on January 7.

Other officers elected at that time were: Carolyn McKinley, M.D., Glasgow, vice president; Lewis Dickinson, M.D., Glasgow, secretary; Russell Starr, M.D., Glasgow, censor (term expires 1958), George P. Whiteside, M.D., Glasgow, censor (term expires 1960); William H. Bryant, M.D., Glasgow, delegate to the KSMA (term 1958-1959); and Eugene Marion, M.D., Glasgow, alternate delegate (term 1958-1959).

Warren

Officers of the Warren County Medical Society for 1958 are Frank H. Moore, Bowling Green, president; Harold Keen, M.D., Bowling Green, vice president; Harris Todd, M.D., Bowling Green, secretary-treasurer.

Delegates to the KSMA are: Harold Keen, M.D., and Harper Wright, M.D., Bowling Green.

Alternate delegates are Keith Coverdale, M.D., and William Russell, M.D.

Members of committees for the coming year were also named. They are as follows, Committee on Diabetes, Martin Wilson, M.D., chairman, Harold Keen, M.D., D. G. Miller, M.D., and Marcus Wilkes, M.D.; Committee on Emergency Medical Service, Henry Harris, M.D., chairman, Walter Sims, M.D., D. G. Miller, M.D., D. B. McIlvoy, M.D., Sam Paris, M.D.

Legislative Committee, J. T. Gilbert, M.D., chairman, W. R. McCormack, M.D., L. O. Toomey, M.D., Harold Keen, M.D., Harper Wright, M.D.; Committee on Public Relations; W. R. McCormack, M.D., chairman, Keith Coverdale, M.D., Travis Pugh, M.D., William Russell, M.D., Richard Grise, M.D.; Committee on Rural Health, J. B. Helm, M.D., R. C. Moss, M.D., John Buris, M.D., Sidney Farmer, M.D., G. H. Freeman, M.D.

Social Committee, A. D. Donnelly, M.D., chairman, William Russell, M.D. Dixon R. McCloy, M.D., Sam Paris, M.D.; Medical Education, Jesse Funk, M.D., chairman, J. Y. Barbee, M.D., R. O. Green, M.D., R. O. Basham, M.D., Waller Griffing, M.D.; Program Committee, B. H. Todd, M.D., Harold Keen, M.D., Dixon R. McCloy, M.D.; Accreditation Committee, Martin Wilson, M.D., L. O. Toomey, M.D., and G. Y. Graves, M.D.

TAKE A LOOK AT
NEW DIMETANE
THE UNEXCELLED
ANTIHISTAMINE

COUNTY SOCIETY REPORTS

Whitley

The Whitley County Medical Society, Inc., 107 South Kentucky Avenue, Corbin, was granted a charter by the secretary of state in Frankfort on January 25.

The following physicians are listed as incorporators: L. X. Brown, F. X. Sommer, Harold B. Barton, Elmer G. Prewitt, B. E. Sandersen, W. L. Burke, Raymond Ohler, W. M. Brown, H. W. Terrell, Keith P. Smith, R. D. Sanders, Charles R. Taylor, Daniel L. Bower, W. Ashley Clinger, Grace Brown, and E. A. McEver.

NEWS ITEMS

J. T. Fuller, M.D., Mayfield, was elected president of the Mayfield-Graves County Recreation Association, Inc., at the annual open meeting of the Association in January. Doctor Fuller, one of the founders of the Association, was named "Mr. Recreation of 1957" by the Jefferson County Youth Recreation Association last summer.

Robert W. Hamm, M.D., has opened an office in Shelbyville for the practice of general surgery. A graduate of the University of Louisville School of Medicine in 1946, he took his internship training in Springfield, Ohio, and in the U. S. Army. From 1950 to 1954 he was in general surgery at the VA Hospital in Louisville and was an instructor in surgery at the U of L. Before coming to Shelbyville he was chief of surgery at the hospital in Grundy, Virginia.

James N. Tulloh, M.D., has opened an office in Central City for the general practice of medicine and anesthesiology. He will be in charge of the department of anesthesia at Muhlenberg Community Hospital in Greenville. Doctor Tulloh received his M.D. degree from the University of Louisville School of Medicine in 1955 and interned at Louisville General Hospital. He has just completed tour of duty in the Navy, including 11 months as chief of anesthesiology at the U. S. Naval Hospital, Memphis.

Paul E. Schneck, M.D., a native of Seymour, Indiana, and a graduate of Indiana University School of Medicine in 1949, has opened an office in Buechel. After his internship at the University of Wisconsin Hospital in Madison and residency at the Good Samaritan Hospital in Cincinnati, he took his pediatric residency at General and Children's hospitals in Louisville. Following a tour of duty with the U. S. Air Force Medical Corps, he served as assistant director, maternal and child health with the Ky. State Department of Health in 1956-57.

A. C. Weakley, M.D., has retired from medical practice after 44 years of active practice in Shelbyville. In 1955, he was honored on 41 years of service by about 75 physicians and their wives at the Old Stone Inn at Simpsonville.

Ralph G. Thomas, M.D., Leitchfield surgeon, was presented a new Chevrolet truck by residents of Grayson County after a party for him at the Leitchfield High School Auditorium on February 6. The presentation was made in appreciation of the fact that he intends to make his permanent home in the County.

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(PARABROMDYLAMINE MALEATE)

TABLETS (4 MG.), ELIXIR (2 MG. PER 5 CC.) AND EXTENTABS® (12 MG.) UNEXCELLED POTENCY, UNSURPASSED THERAPEUTIC INDEX AND RELATIVE SAFETY. MINIMUM DROWSINESS AND OTHER SIDE EFFECTS. A. H. ROBINS CO., INC., RICHMOND, VIRGINIA. ETHICAL PHARMACEUTICALS OF MERIT SINCE 1878

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FOUNDED IN 1904

ASHEVILLE, NORTH CAROLINA

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A non-profit psychiatric institution, offering modern diagnostic and treatment procedures—insulin, electroshock, psychotherapy, occupational and recreational therapy—for nervous and mental disorders. The Hospital is located in a 75-acre tract, amid the scenic beauties of the Smoky Mountain Range of Western North Carolina, affording exceptional opportunity for physical and emotional rehabilitation. The OUT-PATIENT CLINIC offers diagnostic services and therapeutic treatment for selected cases desiring non-resident care.

R. CHARMAN CARROLL, M.D.
Medical Director

ROBERT L. CRAIG, M.D.
Associate Medical Director

JOHN D. PATTON, M.D.
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Established 1907

NASHVILLE -:- TENNESSEE

For the diagnosis and treatment of
mental and nervous disorders, and
addictions to alcohol and drugs

Psychotherapy and occupational therapy

Electrical shock and insulin therapy as indicated

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Treating alcoholism and other problems of addiction
REGISTERED BY THE AMERICAN MEDICAL ASSOCIATION—
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168 North Broadway • Lexington, Kentucky
A private psychiatric hospital offering modern diagnostic and treatment proccdures.
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The name Hamilton is synonymous with quality.

The Crocker-Fels Company
624 S. THIRD ST. CLay 8855 LOUISVILLE, KY.
Ask about our liberal financing plan

RELIEF





FROM INFECTION*

FROM IRRITATION

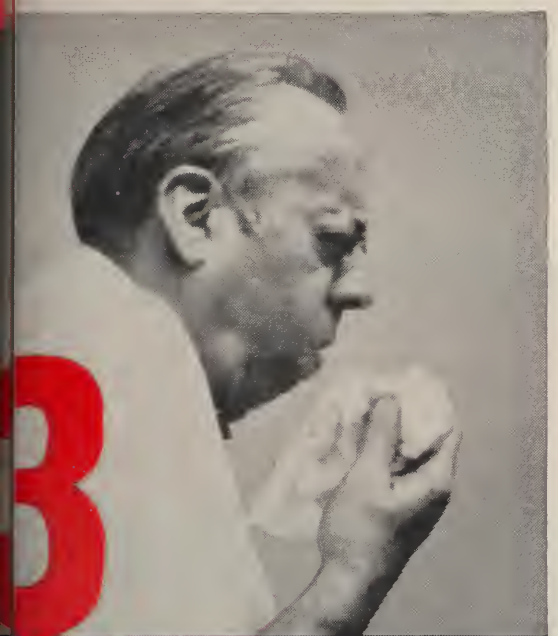
*as adjunctive therapy only

THE FIRST TROCHE TO PROVIDE THREEFOLD BENEFITS

PENTAZETS'

TROCHES

NON-NARCOTIC ANTITUSSIVE EFFICACY SHOWN TO APPROXIMATE THAT OF CODEINE



NOW COUGH CONTROL TOO

With the addition of a non-narcotic antitussive to troche medication, 'PENTAZETS' provides a new and extended therapeutic advantage in this convenient form of treatment.

Treatment of the cough too, so often a troublesome symptom of sore throat, combined with wide-range antibiotic activity and soothing analgesic benefit, now offers *three*fold relief in a variety of throat irritations.

And 'PENTAZETS' are pleasant-tasting, too, making them highly acceptable, especially to children.

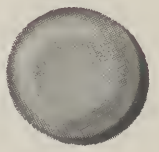
'PENTAZETS' contains:

• *Homarylamine*—a new non-narcotic antitussive with cough control shown to approximate that of codeine. • *Bacitracin-Tyrothricin-Neomycin*—a combined antibiotic treatment against many pathogenic organisms with little danger of unfavorable side effects. • *Benzocaine*—a local anesthetic for soothing relief to inflamed tissues. Being slowly absorbed, it is especially beneficial for prolonged effect and benefit to surrounding areas.

Supplied: Vials of 12.

Each 'PENTAZETS' troche contains:

Homarylamine hydrochloride	20 mg.
Zinc Bacitracin	50 units
Tyrothricin	1 mg.
Neomycin sulfate (equivalent to 3.5 mg. neomycin base)	5 mg.
Benzocaine	5 mg.



MSD

MERCK SHARP & DOHME

DIVISION OF MERCK & CO., INC., PHILADELPHIA 1, PA.

PENTAZETS is a trademark of Merck & Co., Inc.

NEW "Single-R

for



- Symptomatic relief of aches, pains, fever, coryza, and rhinorrhea associated with upper respiratory tract infections.
- Prevention of secondary pyogenic infections due to tetracycline-sensitive organisms — which often follow viral infections of the upper respiratory tract.

Bristol LABORATORIES INC. SYRACUSE, NEW YORK

EDICATION

lu," "grippe," "virus" and the common cold

Tetrex®-APC

with BRISTAMIN®

TETRACYCLINE PHOSPHATE COMPLEX WITH PHENYLTOLOXAMINE AND APC

Each TETREX-APC WITH BRISTAMIN Capsule contains:

A broad-spectrum antibiotic

TETREX (tetracycline phosphate complex) ..... 125 mg.
(tetracycline HCl activity)

An established analgesic-antipyretic combination

Aspirin ..... 150 mg.
Phenacetin ..... 120 mg.
Caffeine ..... 30 mg.

A dependable antihistamine

BRISTAMIN (phenyltoloxamine, Bristol) ..... 25 mg.

Dosage: *Adults:* 2 capsules at onset of symptoms, followed by 2 capsules 3 or 4 times a day for 3 to 5 days. *Children, 6 to 12 yrs.:* One-half adult dose.

Supplied: Bottles of 24 and 100 capsules.

new

INCR

witl



CORRECTS IRON DEFICIENCY AS IT STIMULATES APPETITE

- Offers appetite stimulating Vitamins B_1, B_6, B_{12} and prote upgrading l-Lysine, fortified with a readily absorbed, w tolerated form of iron.
- Delicious cherry base designed to appeal to all patients.

PARTICULARLY FOR CHILDREN

Helps young appetites keep pace with the increased nutritio demands of childhood while supplying adequate amounts essential iron.

EMIN* IRON

LYSINE VITAMINS

SYRUP



rovides the following percentages of Minimum Daily Requirements per teaspoonful:

	Child under 6	Child over 6	Adult
B_1	2000%	1333%	1000%
Iron	400%	300%	300%

ORMULA

ACH TEASPOONFUL (5 cc.) CONTAINS

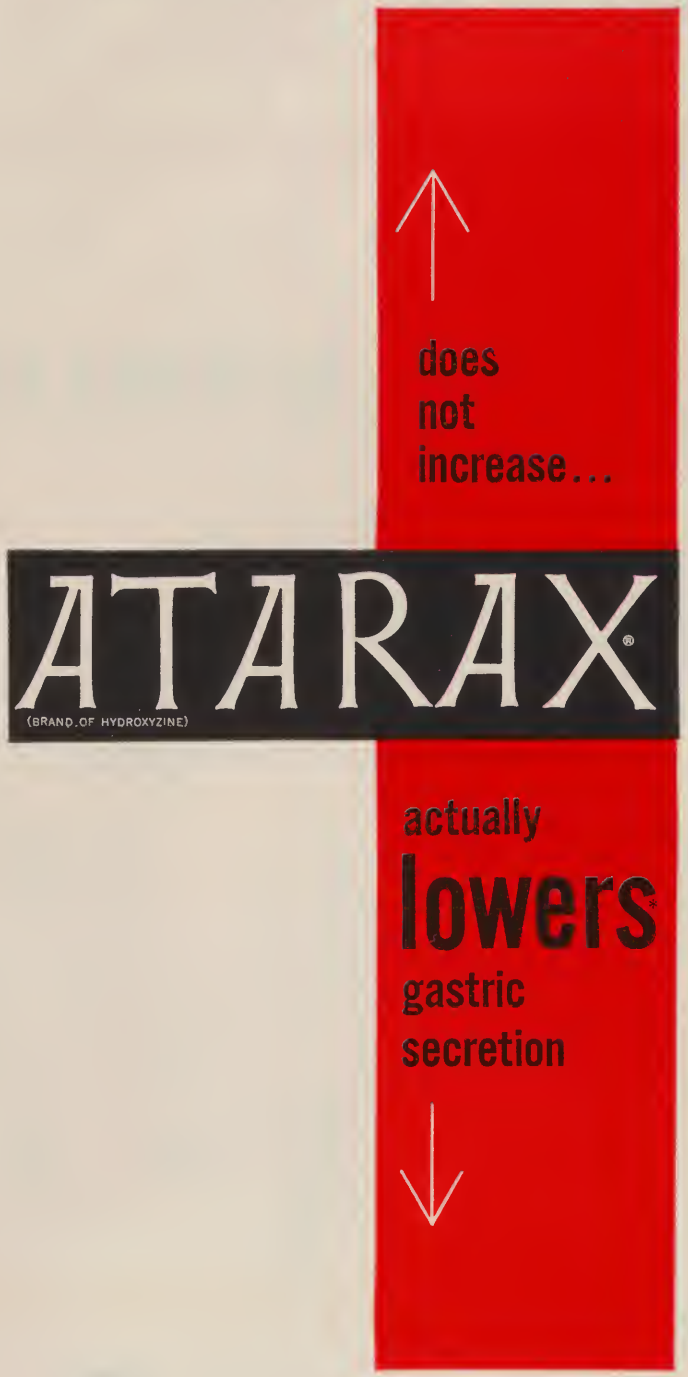
-Lysine HCl	300 mg.
erric Pyrophosphate (Soluble)	250 mg.
ron (as Ferric Pyrophosphate)	30 mg.
/itamin B_{12} Crystalline	25 mcgm.
Thiamine Mononitrate (B_1)	10 mg.
Pyridoxine HCl (B_6)	5 mg.
Alcohol	0.75%

verage dosage is one teaspoonful daily. Available in bottles of 4 fl. oz.

*REG. U. S. PAT. OFF.

EDERLE LABORATORIES DIVISION, AMERICAN CYANAMID COMPANY, PEARL RIVER, NEW YORK Lederle

there is one tranquilizer clearly indicated **in peptic ulcer...**



*Tests in a series of 25 patients show that there is "a definite and distinct lowering [of both volume of secretions and of free hydrochloric acid] in the majority of patients. . . . No patients had shown any increase in gastric secretions following administration of the drug."[1]

Now you have 4 advantages when you calm ulcer patients with ATARAX:

1. ATARAX suppresses gastric secretions; others commonly increase acidity.
2. ATARAX is "the safest of the mild tranquilizers."[2] (No parkinsonian effect or blood dyscrasias ever reported.)
3. It is effective in 9 of every 10 tense and anxious patients.
4. Five dosage forms give you maximum flexibility.

supplied: 10, 25 and 100 mg. tablets, bottles of 100. Syrup, pint bottles. Parenteral Solution, 10 cc. multiple-dose vials.

references: 1. Strub, I. H.: Personal communication. 2. Ayd, F. J., Jr.: presented at Ohio Assembly of General Practice, 7th Annual Scientific Assembly, Columbus, September 18-19, 1957.

ROERIG Rx
New York 17, New York
Division, Chas. Pfizer & Co., Inc.



"Since we've had him on NEOHYDRIN he can walk without dyspnea. I wouldn't have believed it possible a month ago."

oral
organomercurial
diuretic

TABLET
NEOHYDRIN®
BRAND OF CHLORMERODRIN

LAKESIDE

24858

STOP respiratory congestion orally

relief in minutes..lasts for hours

In the common cold, nasal allergies, sinusitis, and postnasal drip, one timed-release Triaminic tablet brings welcome relief of symptoms *in minutes*. Running noses stop, clogged noses open—and *stay* open for 6 to 8 hours. The patient can breathe again.

With *topical* decongestants, "unfortunately, the period of decongestion is often followed by a phase of secondary reaction during which the congestion may be equal to, if not greater than, the original condition. . . ."* The patient then must reapply the medication and the vicious cycle is repeated, resulting in local overtreatment, pathological changes in nasal mucosa, and frequently "nose drop addiction."

Triaminic does not cause secondary congestion, eliminates local overtreatment and consequent nasal pathology.

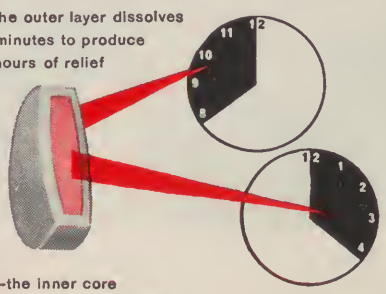
*Morrison, L. F.: Arch. Otolaryng. 59:48-53 (Jan.) 1954.

Each double-dose "timed-release" TRIAMINIC *Tablet contains:*

Phenylpropanolamine hydrochloride	50 mg.
Pyrilamine maleate	25 mg.
Pheniramine maleate	25 mg.

Dosage: 1 tablet in the morning, afternoon, and in the evening if needed.

Each double-dose "timed-release" tablet keeps nasal passages clear for 6 to 8 hours— provides "around-the-clock" freedom from congestion on just three tablets a day



Also available: Triaminic Syrup, for children and those adults who prefer a liquid medication.

Triaminic®

"timed-release" tablets

STOP *running noses . . . and open stuffed noses orally*

SMITH-DORSEY • a division of The Wander Company • Lincoln, Nebraska • Peterborough, Canada

in common mixed infections
...tetracycline phosphate alone

PANMYCIN* Phosphate

for children:

PANMYCIN KM Syrup

TRADEMARK

BROAD-SPECTRUM TETRACYCLINE IN ITS MOST EFFICIENT FORM

Produces more tetracycline in the blood with no more in the dose. No calcium to depress blood levels.[1] Basic broad-spectrum therapy in bronchitis, pharyngitis, otitis media, tonsillitis, and other common respiratory infections.

1. Welch, H.; Wright, W. W.; and Staffa, A. W.: Antibiotic Med. & Clin. Therapy 4:620, 1957.

in potentially serious infections
...tetracycline phosphate plus novobiocin

PANALBA*

for children:

PANALBA KM Granules

TRADEMARK

THE BREADTH OF PANMYCIN PHOSPHATE PLUS THE ANTIMICROCOCCAL DEPTH OF ALBAMYCIN†

Offers maximum antimicrobial action at the earliest possible moment. The antibiotic preparation of first resort in pneumonia of unknown etiology, carbuncles, multiple furunculosis, cellulitis, and infections resistant to previous therapy.

† TRADEMARK, REG. U. S. PAT. OFF. — THE UPJOHN BRAND OF CRYSTALLINE NOVOBIOCIN SODIUM

for the 7 monilia-susceptible types
...tetracycline phosphate plus nystatin

COMYCIN*

PANMYCIN PHOSPHATE PLUS THE ANTIMONILIAL PROTECTION OF NYSTATIN

The logical choice for patients requiring high doses of antibiotics or prolonged antibiotic therapy; for patients with previous monilial complications; for diabetics; patients on corticoids; the pregnant, debilitated, or elderly; and for infants, especially the premature.

Upjohn

The Upjohn Company, Kalamazoo, Michigan



THE CHOICE OF A SYSTEMIC ANTIBIOTIC IS A MATTER OF CLINICAL JUDGMENT

1. PANMYCIN PHOSPHATE IN COMMON MIXED INFECTIONS

USUAL DOSAGE: ADULTS: 250 mg. every 6 hours or 500 mg. every 12 hours. CHILDREN: Approximately 8 mg. per pound of body weight daily, in four equally divided doses every 6 hours, or two equally divided doses every 12 hours.

SUPPLIED: CAPSULES: 250 mg. in bottles of 16 and 100; 125 mg. in bottles of 25 and 100.

PANMYCIN KM SYRUP: Each teaspoonful (5 cc.) contains tetracycline equivalent to 125 mg. tetracycline hydrochloride, and potassium metaphosphate, 100 mg., mint flavor, in 2 fluidounce and pint bottles.

2. PANALBA IN POTENTIALLY SERIOUS INFECTIONS

USUAL DOSAGE: ADULTS: 1 or 2 capsules three or four times a day, depending on the type and severity of the infection. CHILDREN: Proportionately less.

SUPPLIED: Each powder-blue-and-brown capsule contains Panmycin (tetracycline) Phosphate complex equivalent to 250 mg. tetracycline hydrochloride, and Albamycin (as novobiocin sodium) 125 mg.; in bottles of 16 and 100.

Also available: **PANALBA KM GRANULES** (Pediatric). When reconstituted, each 5 cc. teaspoonful contains Panmycin equivalent to tetracycline hydrochloride, 125 mg. and Albamycin (as novobiocin calcium) 62.5 mg., and potassium metaphosphate 100 mg.; in pleasantly flavored vehicle. Dosage is based upon amount of tetracycline—6 to 8 mg. per pound of body weight per day in 2 to 4 equally divided doses.

3. COMYCIN FOR THE 7 MONILIA-SUSCEPTIBLE TYPES

USUAL DOSAGE: ADULTS: 1 or 2 capsules every 6 hours. CHILDREN: Proportionately less.

SUPPLIED: Each brown-and-pink capsule contains tetracycline phosphate complex, equivalent to 250 mg. tetracycline hydrochloride; nystatin 250,000 units. In bottles of 16 and 100.

Upjohn

The Upjohn Company, Kalamazoo, Michigan

How Old s Too Old for Tranquilizers ?

The psychological needs of the elderly confront physicians with one of their most perplexing problems. Perhaps no other patient group suffers so much from emotional distress. Yet, precisely because of their age, geriatric patients often seem beyond the reach of tranquilizing treatment.

When tranquilization seems risky . . .

They are too much beset by complicating chronic ailments, too susceptible to serious side effects. Ataraxia is clearly indicated, yet the doctor cannot risk side reactions on liver, blood or nervous system.

Is there an answer to this dilemma?

We feel there is. In four recent papers investigators have reported good results with ATARAX in patients up to 90 years of age.* In one study, **improvement was "pronounced" in 76%, "good" in an additional 18.5%.*** ATARAX has been successfully used in such cases as senile anxiety, agitation, hyperemotivity and persecution complex.* On ATARAX, patients became ". . . quieter and more manageable. They slept better and demonstrated improved relations with other patients and hospital personnel. Even their personal hygiene improved, and they required less supervisory management."*

. . . ATARAX is safe

Yet even in the aged, ATARAX has given "no evidence of toxicity. . . . Complete liver function tests and blood studies were made on all patients after two months of therapy. . . . There were no significant abnormalities."* With still other elderly patients "tolerance to the drug was excellent, even in cases where the patients were given relatively high doses."* Similarly, no parkinsonian effects have been observed on ATARAX therapy.

Nor does ATARAX make your patients want to sleep all day. Instead, they can better take care of themselves, because ATARAX leaves them both calm and alert. In sum, ATARAX ". . . does not impair psychic function and has a minimum of side effects. . . . It appears that ATARAX is a safe drug. . . ."*

These, undoubtedly, are the results you want when emotional problems beset your geriatric patients. For the next four weeks, won't you prescribe tiny ATARAX tablets or pleasant-tasting ATARAX syrup — both so readily acceptable to the elderly.

*Documentation on request

ATARAX®
(BRAND OF HYDROXYZINE)

M. A. Seidel M.D.
Medical Director

ATARAX
n any
yperemotive
tate

r childhood behavior disorders
10 mg. tablets—3-6 years, one tablet t.i.d.; over 6 years, two tablets t.i.d. Syrup—3-6 years, one tsp. t.i.d.; over 6 years, two tsp. t.i.d.

r adult tension and anxiety
25 mg. tablets—one tablet q.i.d. Syrup—one tbsp. q.i.d.

r severe emotional disturbances
100 mg. tablets—one tablet t.i.d.

r adult psychiatric and emotional mergencies
Parenteral Solution—25-50 mg. (1-2 cc.) intramuscularly, 3-4 times daily, at 4-hour intervals. Dosage for children under 12 not established.

upplied: Tablets, bottles of 100. Syrup, int bottles. Parenteral Solution, 10 cc. ultiple-dose vials.

Roerig
New York 17, New York
Division, Chas. Pfizer & Co., Inc.



release from pain and inflammation

with **BUFFERIN®**

IN ARTHRITIS

salicylate benefits with minimal salicylate drawbacks

Rapid and prolonged relief — with less intolerance. The analgesic and specific anti-inflammatory action of BUFFERIN helps reduce pain and joint edema—comfortably. BUFFERIN caused no gastric distress in 70 per cent of hospitalized arthritics with proved intolerance to aspirin. (Arthritics are at least 3 to 10 times as intolerant to straight aspirin as the general population.[1])

No sodium accumulation. Because BUFFERIN is sodium free, massive dosage for prolonged periods will not cause sodium accumulation or edema, even in cardiovascular cases.

Each *sodium-free* BUFFERIN tablet contains acetylsalicylic acid, 5 grains, and the antacids magnesium carbonate and aluminum glycinate.

Reference: 1. J.A.M.A. 158:386 (June 4) 1955.

ANOTHER FINE PRODUCT OF BRISTOL-MYERS

Bristol-Myers Company
19 West 50 St., New York 20, N. Y



The purity, the wholesomeness, the quality of Coca-Cola as refreshment has helped make Coke the best-loved sparkling drink in all the world.

DRINK Coca-Cola
REG. U.S. PAT. OFF.

SIGN OF GOOD TASTE

a new high in
anti-inflammatory effects
with lower dosage
(averages 1/3 less than
prednisone)

The
Achievements
of

Aristocort®

Triamcinolone LEDERLE

a new low in the collateral
hormonal effects associated
with all previous corticosteroids

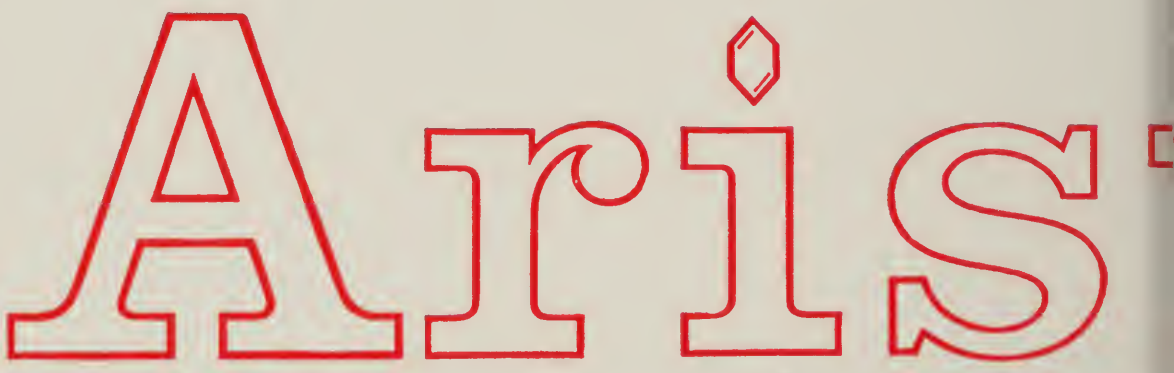
- No sodium or water retention
- No potassium loss
- No interference with psychic equilibrium
- Low incidence of peptic ulcer and osteoporosis

Aristocort is available in 2 mg. scored tablets (pink), bottles of 30; and 4 mg. scored tablets (white), bottles of 30 and 100.

Lederle

The Achievement in Skin Diseases: In a study of 26 patients with severe dermatoses, ARISTOCORT was proved to have potent anti-inflammatory and antipruritic properties, even at a dosage only ⅔ that of prednisone.[1]... Striking affinity for skin and tremendous potency in controlling skin disease, including 50 cases of psoriasis, of which over 60% were reported as *markedly improved*[2]... absence of serious side effects specifically noted.[1,2,3]

The Achievement in Rheumatoid Arthritis: Impressive therapeutic effect in most cases of a group of 89 patients[4]...6 mg. of ARISTOCORT corresponded in effect to 10 mg. of prednisone daily (in addition, gastric ulcer which developed during prednisone therapy in 2 cases disappeared during ARISTOCORT therapy).[5]



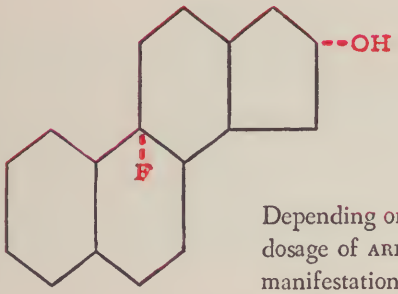
1. Rein, C. R., Fleischmajer, R., and Rosenthal, A. L.: J. A. M. A. *165*:1821, (Dec. 7) 1957.
2. Shelley, W. B., and Pillsbury, D. M.: Personal Communication.
3. Sherwood, A., and Cooke, R. A.: Personal Communication.
4. Freyberg, R. H., Berntsen, C. A., and Hellman, L.: Paper presented at International Congress on Rheumatic Diseases, Toronto, June 25, 1957.
5. Hartung, E. F.: Personal Communication.
6. Schwartz, E.: Personal Communication.
7. Sherwood, A., and Cooke, R. A.: J. Allergy 28:97, 1957.
8. Hellman, L., Zumoff, B., Kretshmer, N., and Kramer, B.: Paper presented at Nephrosis Conference, Bethesda, Md., Oct. 26, 1957.
9. Ibid.: Personal Communication.
10. Barach, A. L.: Personal Communication.
11. Segal, M. S.: Personal Communication.
12. Cooke, R. A.: Personal Communication.
13. Dubois, E. L.: Personal Communication.

The Achievement in Respiratory Allergies: "Good to excellent" results in 29 of 30 patients with chronic intractable bronchial asthma at an average daily dosage of only 7 mg.[6]... Average dosage of 6 mg. daily to control asthma and 2 to 6 mg. to control allergic rhinitis in a group of 42 patients, with an actual reduction of blood pressure in 12 of these.[7]

The Achievement in Other Conditions: Two failures, 4 partial remissions and 8 cases with complete disappearance of abnormal chemical findings lead to characterization of ARISTOCORT as possibly the most desirable steroid to date in treatment of the nephrotic syndrome.[8,9]... Prompt decrease in the cyanosis and dyspnea of pulmonary emphysema and fibrosis, with marked improvement in patients refractory to prednisone.[10,11,12]... Favorable response reported for 25 of 28 cases of disseminated lupus erythematosus.[13]

ocort®

Triamcinolone LEDERLE



Depending on the acuteness and severity of the disease under therapy, the initial dosage of ARISTOCORT is usually from 8 to 20 mg. daily. When acute manifestations have subsided, maintenance dosage is arrived at gradually, usually by reducing the total daily dosage 2 mg. every 3 days until the smallest dosage has been reached which will suppress symptoms.

Comparative studies of patients changed to ARISTOCORT from prednisone indicate a dosage of ARISTOCORT lower by about ⅓ in rheumatoid arthritis, by ⅓ in allergic rhinitis and bronchial asthma, and by ⅓ to ½ in inflammatory and allergic skin diseases. With ARISTOCORT, no precautions are necessary in regard to dietary restriction of sodium or supplementation with potassium.

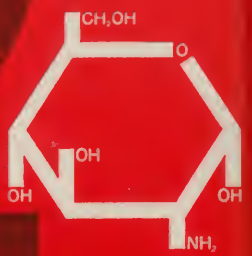
ARISTOCORT is available in 2 mg. scored tablets (pink), bottles of 30; and 4 mg. scored tablets (white), bottles of 30 and 100.

Lederle LEDERLE LABORATORIES DIVISION, AMERICAN CYANAMID COMPANY, PEARL RIVER NEW YORK

Three advantages of glucosamine-potentiated tetracycline:

1 ***Highest, fastest tetracycline blood levels,*** with glucosamine enhancement. A screening program involving 84 possible adjuvants, multiple four-way crossover tests, 30,000 blood level determinations and more than 100,000 assays proved glucosamine to be the enhancing agent of choice.

2 ***Greatest consistency of higher tetracycline blood levels*** Not only does glucosamine considerably increase antibiotic blood levels faster, but it produces these higher blood levels more consistently as shown by extensive crossover tests.



3 ***Achieved with the physiologic advantages of glucosamine,*** a normal human metabolite. Glucosamine, found widely in the body, is nontoxic and does not irritate the gastrointestinal tract; there is evidence that glucosamine may favorably influence the bacterial flora of the intestine. Further, it is sodium free and releases only four calories of energy per gram.

in new well-tolerated

The most widely prescribed broad-spectrum antibiotic now potentiated with glucosamine, the enhancing agent of choice

COSA-TETRACYN*

GLUCOSAMINE-POTENTIATED TETRACYCLINE

Capsules, 250 mg., 125 mg.
Half strength (125 mg. capsules) for long-term indications or pediatric use.

Pfizer Laboratories, Division, Chas. Pfizer & Co., Inc., Brooklyn 6, N.Y.

*Trademark

MY DAD— HE HURT HIS BACK REAL BAD

"It happened at work while he was putting oil in something"



"He told Mom his shoulder felt like it was on fire"



"He couldn't swing a bat without hurting"



"But Doctor gave him some nice pills--and the pain went away fast"



"Dad said we'd play ball again tomorrow when he comes home"



AND THE PAIN WENT AWAY FAST

FOR PAIN

Percodan®

(Salts of Dihydrohydroxycodeinone and Homatropine, plus APC) **TABLETS**

ACTS FASTER...
usually within 5-15 minutes

LASTS LONGER...
usually for 6 hours or more

MORE THOROUGH RELIEF...
permits uninterrupted sleep through the night

RARELY CONSTIPATES...
excellent for chronic or bedridden patients

and now... NEW

Percodan®-Demi

VERSATILE

New "demi" strength permits dosage flexibility to meet each patient's specific needs. PERCODAN-DEMI provides the PERCODAN formula with one-half the amount of salts of dihydrohydroxycodeinone and homatropine.

AVERAGE ADULT DOSE: 1 tablet every 6 hours. May be habit-forming. Available through all pharmacies.

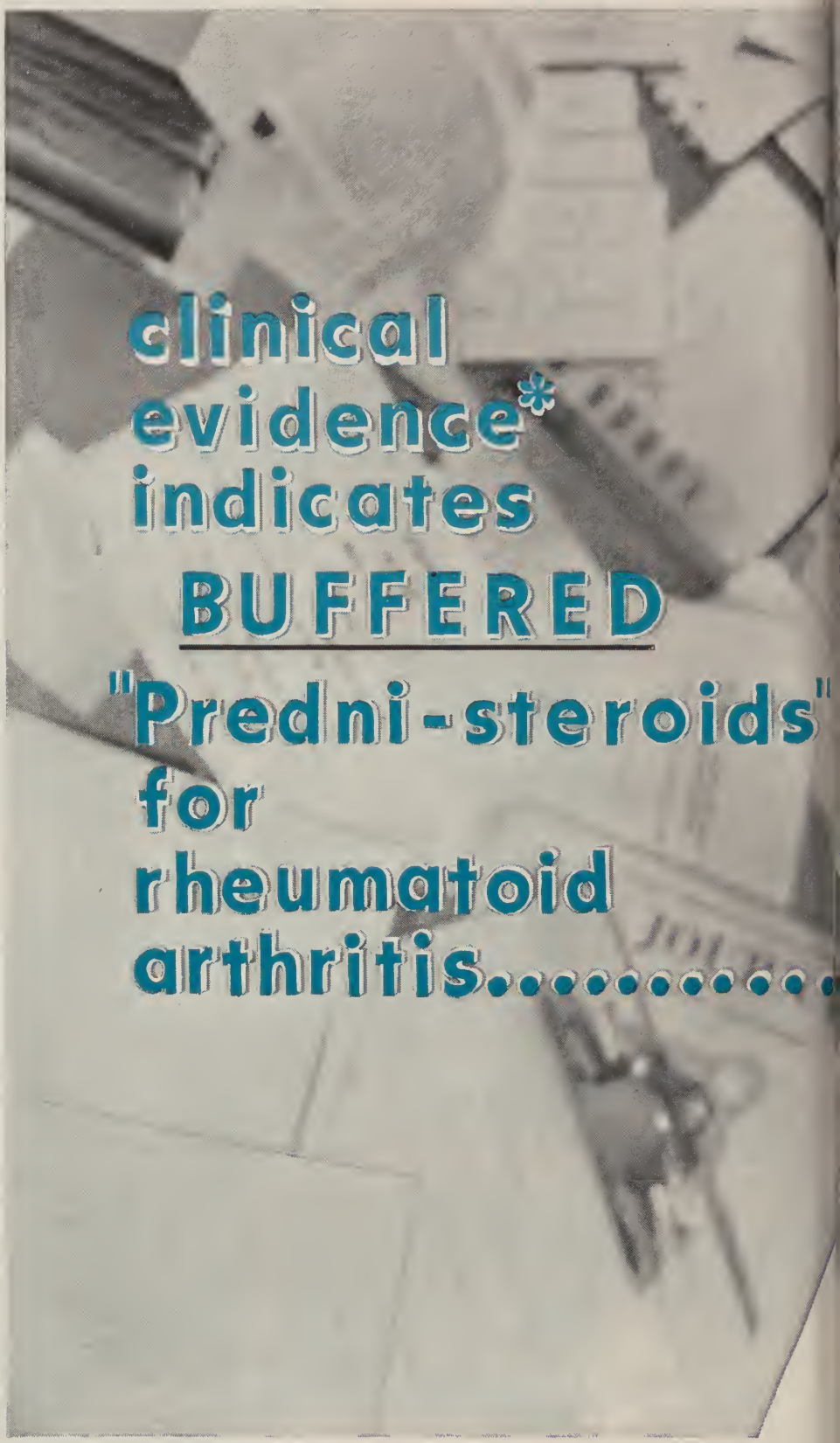
Each PERCODAN* Tablet contains 4.50 mg. dihydrohydroxycodeinone hydrochloride, 0.38 mg. dihydrohydroxycodeinone terephthalate, 0.38 mg. homatropine terephthalate, 224 mg. acetylsalicylic acid, 160 mg. phenacetin, and 32 mg. caffeine.

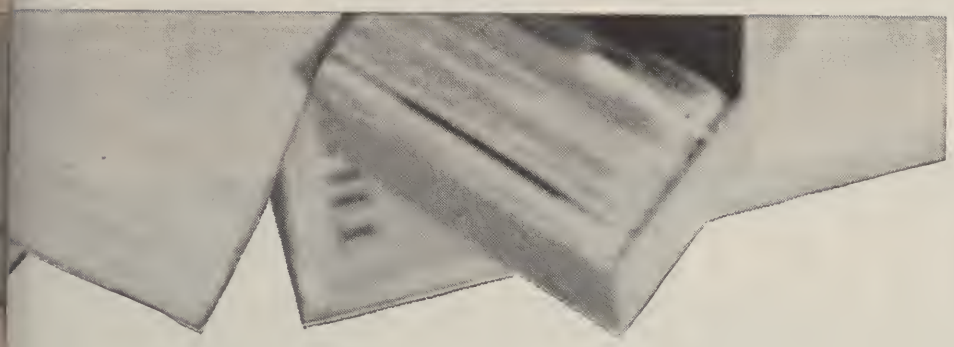
Literature? Write

Endo®

ENDO LABORATORIES
Richmond Hill 18, New York

*U.S. Pat. 2,628,185


clinical
evidence*
indicates
BUFFERED
"Predni-steroids"
for
rheumatoid
arthritis.....



Gastric distress accompanying "predni-steroid" therapy is a definite clinical problem—well documented in a growing body of literature.

...y of the beneficial re-
...served when antacids
...iets were used concom-
...prednisone and predni-
...cel that these measures
...employed prophylacti-
...set any gastrointestinal
..."—Dordick, J. R. *et al.*:
J. Med. 57:2049 (June

*"It is our growing conviction that all patients receiving oral steroids should take each dose after food or with adequate buffering with aluminum or magnesium hydroxide preparations."—Sigler, J. W. and Ensign, D. C.: J. Kentucky State M. A. 54:771 (Sept.) 1956.

*"The apparent high incidence of this serious [gastric] side effect in patients receiving prednisone or prednisolone suggests the advisability of routine co-administration of an aluminum hydroxide gel."—Bollet, A. J. and Bunim, J. J.: J. A. M. A. 158:459 (June 11) 1955.

One way to make sure that patients receive full benefits of "predni-steroid" therapy plus positive protection against gastric distress is by prescribing CO-DELTRA or CO-HYDELTRA.

...-Deltra®
PREDNISONE BUFFERED
compressed tablets

provide all the benefits of "Predni-steroid" therapy—plus positive antacid protection against gastric distress

...-Hydeltra®
PREDNISOLONE BUFFERED



2.5 mg. or 5.0 mg. of prednisone or prednisolone, plus 300 mg. of dried aluminum hydroxide gel and 50 mg. magnesium trisilicate, in bottles of 30, 100, 500.

MERCK SHARP & DOHME Division of MERCK & CO., Inc., Philadelphia 1, Pa. MSD

NEW *"flavor-timed" dual-action*
CORONARY VASODILATOR

Dilcoron TRADEMARK

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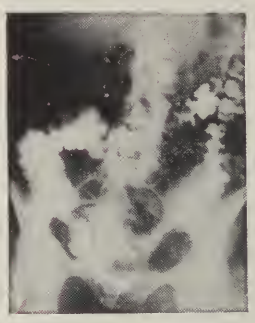
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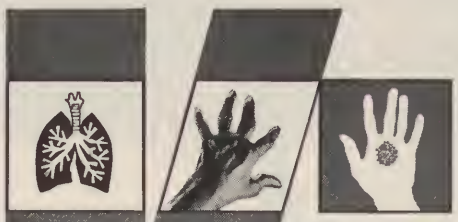
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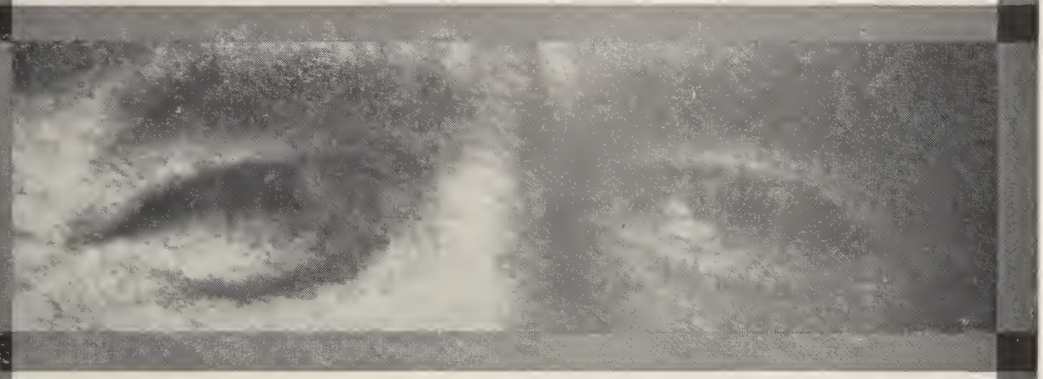
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Source—Hyman, M.: Some Aspects of Psychiatry in General Practice, GP *16*:83 (Oct.) 1957.

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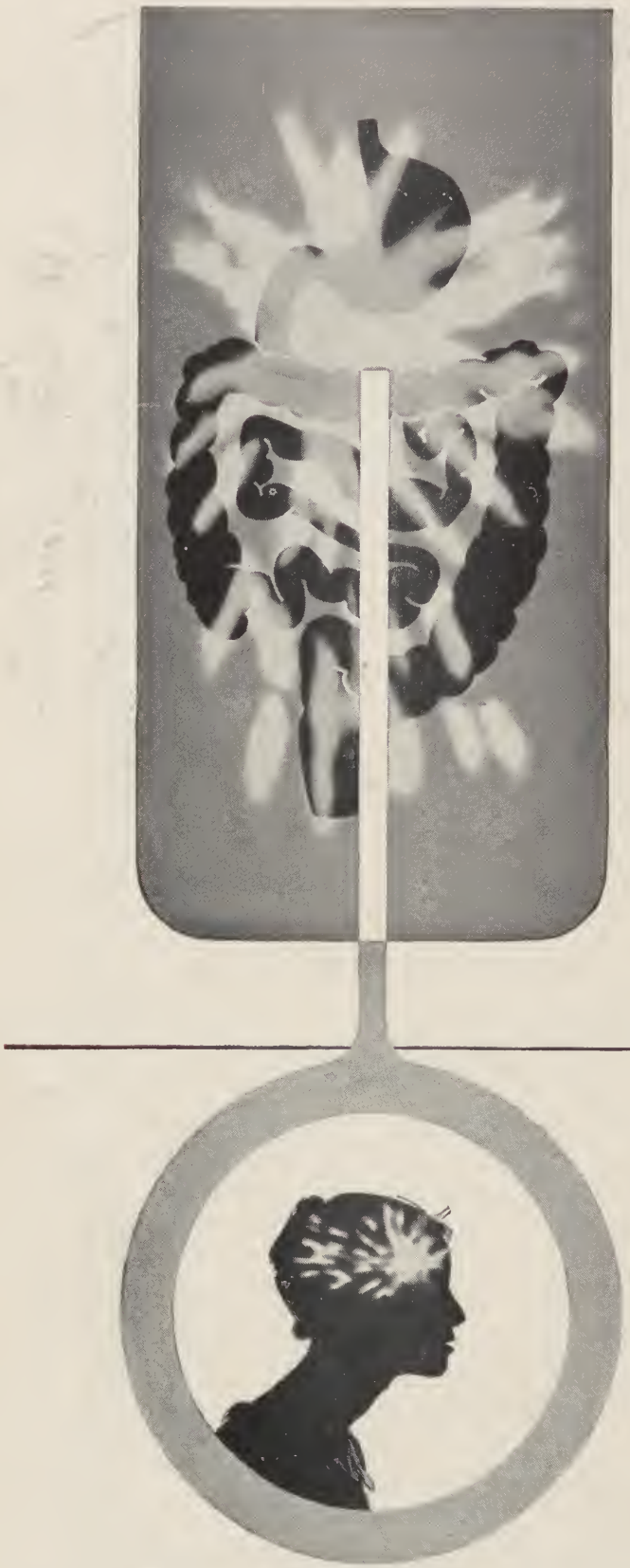
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Carcinoma of the Stomach

Eosinophilic Granuloma of Bone

CLML VOLUME 56 • NUMBER 4 • APRIL 1958



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References: (1) Greenblatt, R. B., & Clark, S. L.: M. Clin. North America, Philadelphia, W. B. Saunders Company (Mar.) 1957, p. 587. (2) Greenblatt, R. B.: *J. Clin. Endocrinol.* *16*:869, 1956. (3) Hertz, R.; Waite, J. H., & Thomas, L. B.: *Proc. Soc. Exper. Biol. & Med.* *91*:418, 1956.

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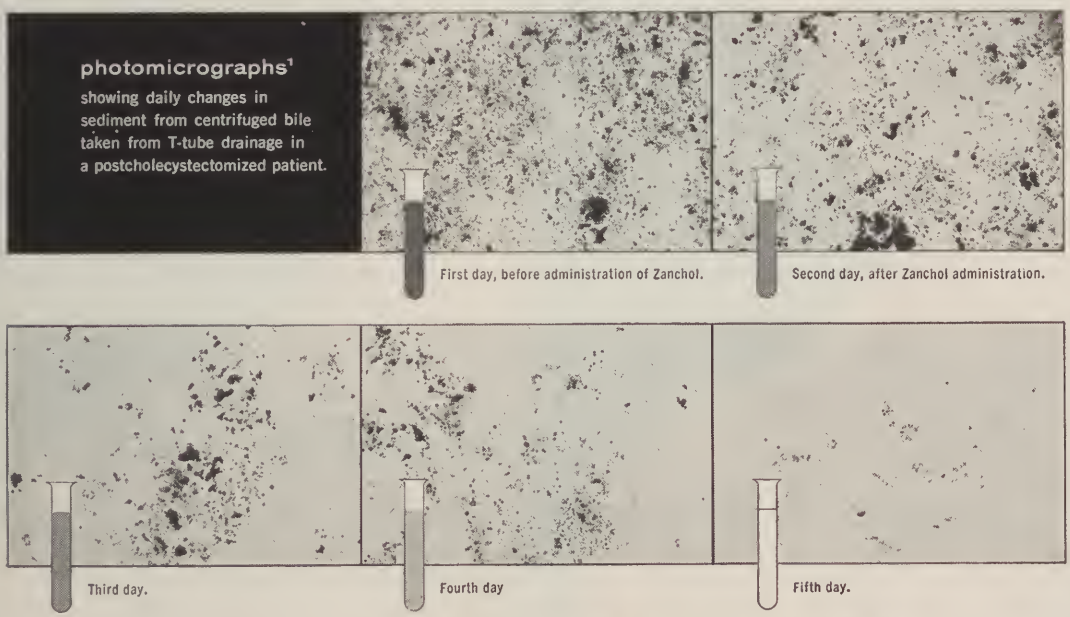
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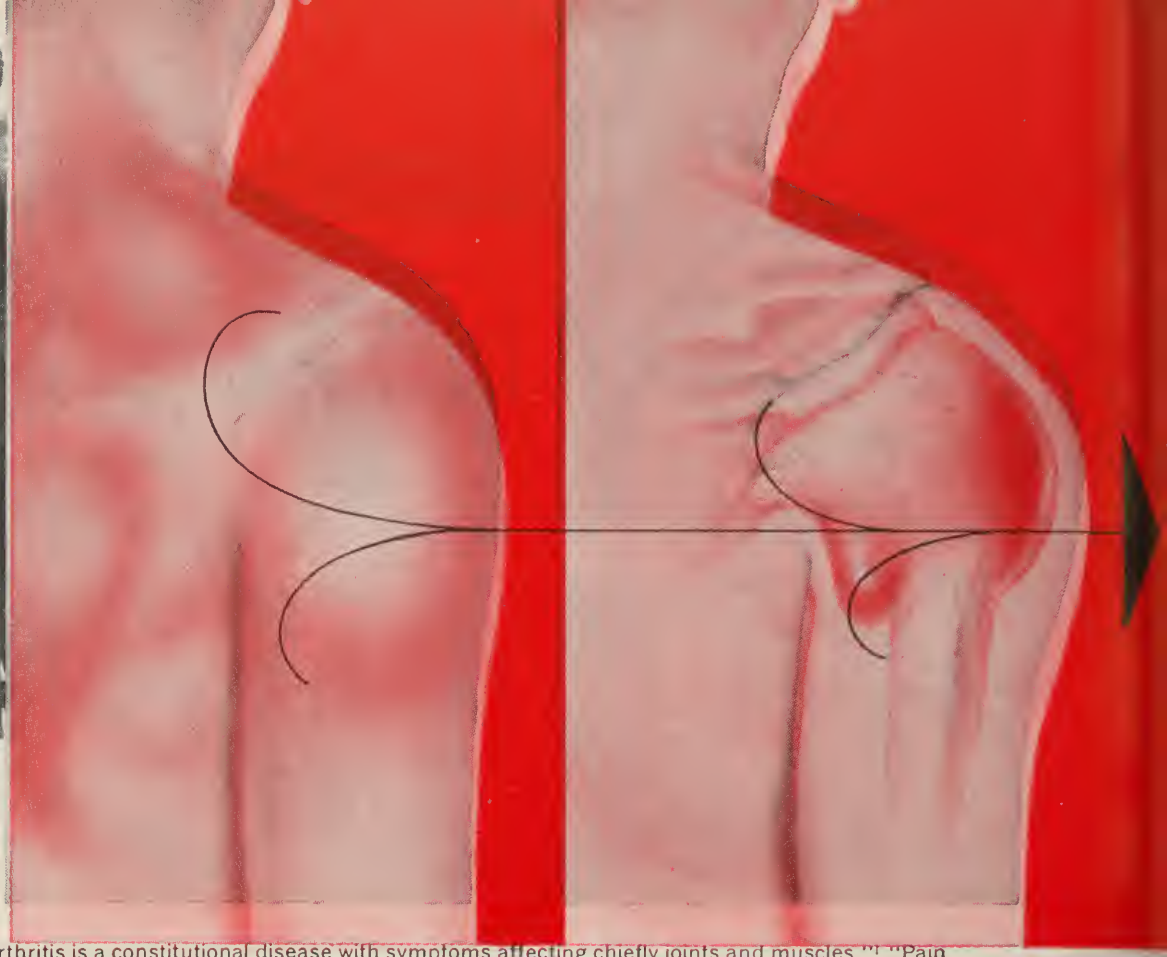
Research in the Service of Medicine.



1. McGowan, J. M.: Clinical Significance of Changes in Common Duct Bile Resulting from a New Synthetic Choleretic, Surg., Gynec. & Obst. *103*:163 (Aug.) 1956.

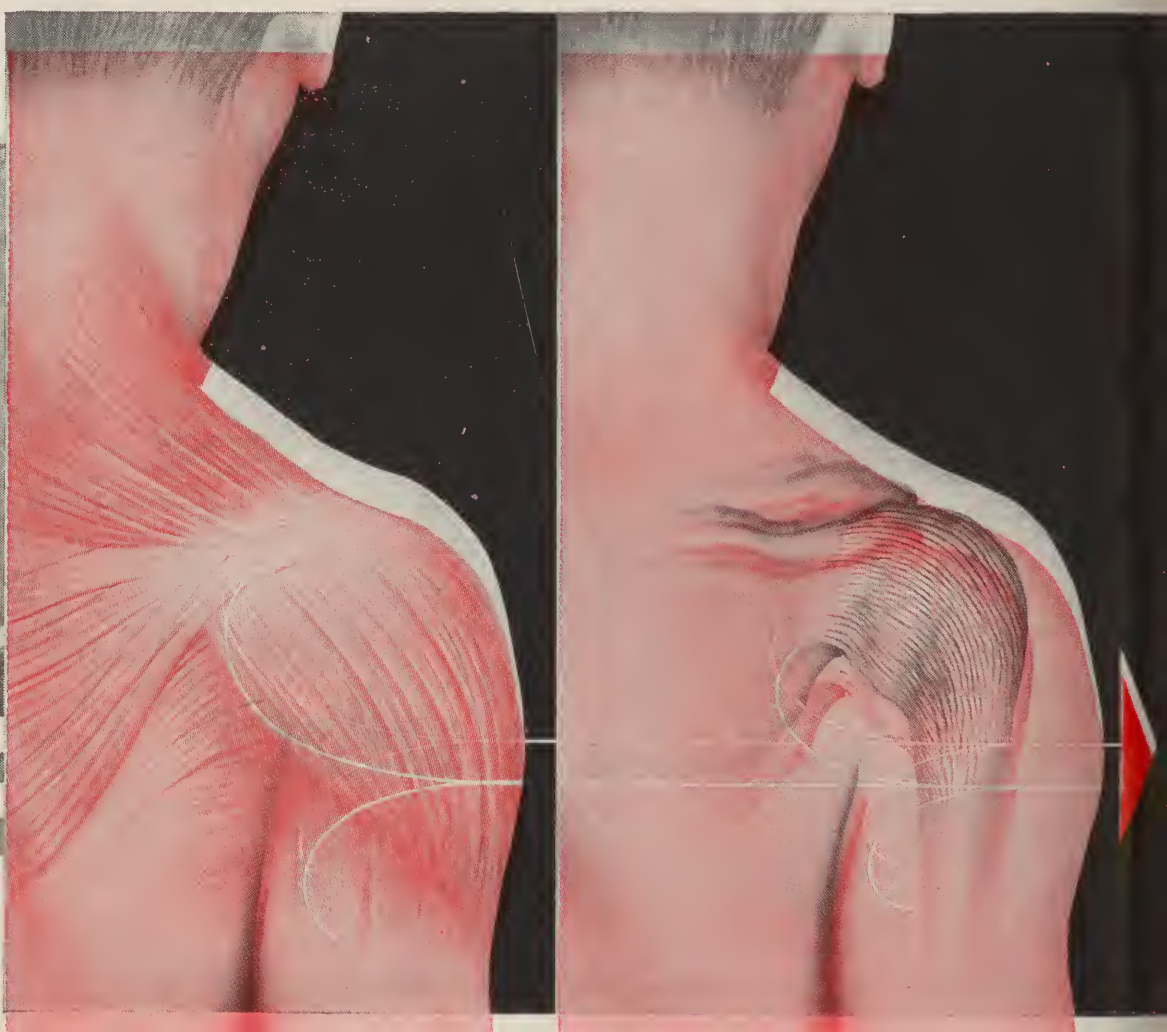
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1. Comroe's Arthritis: Hollander, J. L., p. 149 (Fifth Edition, Lea & Febiger, Philadelphia, Pa. 1953).
2. Merck Manual: Lyght, C. E., p. 1102 (Ninth Edition, Merck & Co., Inc., Rahway, N. J. 1956).

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IN THE BOOKS



Books Received

Following is a list of books received by the Association for review. Those considered of particular interest to Journal readers will be reviewed as space permits. All complimentary copies of books received are turned over to the University of Louisville-Jefferson County Medical Society Library. Inquiries concerning a particular book should be made to the KSMA Headquarters Office, 1169 Eastern Parkway, Louisville 17, Ky.

A THERAPY FOR ANXIETY AND TENSION REACTIONS: by Gerhard B. Haugen, M.D., Henry H. Dixon, M.D., and Herman A. Dickel, M.D.; published by the Macmillan Company, New York.

CURRENT THERAPY 1958; edited by Howard F. Conn, M.D.; published by W. B. Saunders and Company, Philadelphia and London.

DIABETES AS A WAY OF LIFE: T. S. Danowski, M.D., published by Coward-McCann, Inc., New York.

GENERAL PATHOLOGY: based on lectures delivered at the Sir William Dunn School of Pathology, University of Oxford, edited by Sir Howard Florey, professor of pathology; published by W. B. Saunders Company, Philadelphia and London.

THE ESSENCE OF SURGERY: by C. Stuart Welch, M.S., M.D., Ph.D., and Samuel R. Powers, Jr., A.B., M.D., M.Sc.D., published by W. B. Saunders Company, Philadelphia and London.

THE NEUROSES AND THEIR TREATMENT: edited by Edward Podolsky, M.D.; published by the Philosophical Library Inc., New York.

INTRODUCTION TO ANESTHESIA: The Principles of Safe Practice; Robert D. Dripps, M.D., James E. Eckenhoff, M.D., and Leroy D. Vandam, M.D.; The W. B. Saunders Company, Philadelphia and London, September, 1957; 266 pages, 47 figures; price, $4.75.

This book is intended primarily for the student in anesthesiology. The material presented is such that anesthesiologists, surgeons, obstetricians, medical consultants and the practitioner occasionally administering anesthesia will find much included that is of interest and value to them.

The subject matter is arranged into five sections: The Pre-anesthetic Period, The Day of Anesthesia, During Operation, The Postoperative Period, and Special Topics. Each section is further subdivided into chapters.

The text reads easily and is concise. Controversial questions such as choice of anesthesia, pre-anesthetic medication, spinal anesthesia and muscle relaxants are especially well presented. More complex techniques such as hypothermia, induced hypotension, hypnosis, etc., have been purposely omitted, since this is, in fact, an introduction to anesthesia. This book is well printed and contains a useful index.

The subject matter discussed and the manner in which it has been presented reflects the skill of the authors as teachers. This volume can be heartily recommended to all physicians having professional obligations to patients who are going to require anesthesia.

Eugene H. Conner, M.D.

ALLERGY IN PEDIATRIC PRACTICE: by William B. Sherman, M.D., and Walter R. Kessler, M.D., Ph.D., published by C. V. Mosby Company, St. Louis, October, 1957; 296 pages; Illustrated; price, $9.25.

This book is designed especially for general practitioners and pediatricians without special training in allergy.

The subject matter is presented in a logical and orderly fashion. The early chapters are an excellent review of the basic concepts of immunology and allergy. The presentation is simple, clear and concise.

Scattered throughout the text are many lucid sections. The discussion of Loeffler's syndrome is well done.

The chapter on Diagnosis of Specific Causative Allergens is informative and helpful. The use of skin tests and passive transfer tests is well explained. This section should enable the practitioner to do allergy "work-ups," time permitting.

Several chapters are devoted to the various atopic diseases. The presentations are basic. This makes for several good discussions, such as the role of heredity, also, the role of the skin sensitizing antibodies which are generally found in the serum of patients with atopic disease.

This forms the basis for the Prausnitz-Kustner reaction. In this test the serum of a patient with atopic disease when injected into the normal human skin passively sensitizes it for several weeks.

Infection as the most common factor in the group of atopic patients is well stressed. The authors feel that skin testing for bacterial allergy is of very little value. They feel that bacterial antigens are of aid for the allergic patient with secondary bacterial infection, but not in the non-allergic patient.

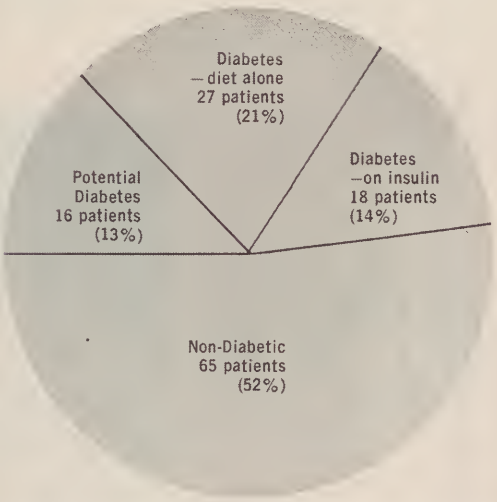
Several chapters, however, are scanty in the material and omissions are evident. A few of the more obvious examples follow: There is no discussion of erythema multiforme. When drug allergies are discussed novocain is not mentioned.

In the main, this book is a beginning. One feels after completing it that a more complete volume would serve better for the actual practice of allergy and for a deeper understanding.

N. I. Handelman, M.D.

(Continued on Page 329)

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CLINICAL BRIEFS FOR MODERN PRACTICE



should a non-diabetic, transient glycosuria ever be considered unimportant?

Never. A patient showing even a mild transient glycosuria should be observed for years as a diabetic suspect.*

Ultimate diagnosis on 126 patients with a previous transient mild glycosuria. Twenty diabetics were discovered 5-10 years after a recorded glycosuria—10 diabetics after more than 10 years.*

*Murphy, R.: Connecticut M. J. *21*:306, 1957.

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for reliable quantitative estimations

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ONLY ONE TABLET A DAY



now . . . unprecedented Sulfa therapy

KYNEX*

SULFAMETHOXYPYRIDAZINE LEDERLE

New authoritative studies show that KYNEX dosage can be reduced even further than that recommended earlier.[1] Now, clinical evidence has established that a single (0.5 Gm.) tablet maintains therapeutic blood levels extending beyond 24 hours. Still more proof that KYNEX stands alone in sulfa performance—

- Lowest Oral Dose In Sulfa History—0.5 Gm. (1 tablet) daily in the usual patient for maintenance of therapeutic blood levels
- Higher Solubility—effective blood concentrations within an hour or two
- Effective Antibacterial Range—exceptional effectiveness in urinary tract infections
- Convenience—the low dose of 0.5 Gm. (1 tablet) per day offers optimum convenience and acceptance to patients

NEW DOSAGE

The recommended adult dose is 1 Gm. (2 tablets or 4 teaspoonfuls of syrup) the first day, followed by 0.5 Gm. (1 tablet or 2 teaspoonfuls of syrup) every day thereafter, or 1 Gm. every other day for mild to moderate infections. In severe infections where prompt, high blood levels are indicated, the initial dose should be 2 Gm. followed by 0.5 Gm. every 24 hours. Dosage in children, according to weight; i.e., a 40 lb. child should receive ¼ of the adult dosage. It is recommended that these dosages not be exceeded.

Tablets:
Each tablet contains 0.5 Gm. (7½ grains) of sulfamethoxypyridazine. Bottles of 24 and 100 tablets.

Syrup:
Each teaspoonful (5 cc.) of caramel-flavored syrup contains 250 mg. of sulfamethoxypyridazine. Bottle of 4 fl. oz.

[1] Nichols, R. L. and Finland, M.: J. Clin. Med. 49:410, 1957.

LEDERLE LABORATORIES DIVISION, AMERICAN CYANAMID COMPANY, PEARL RIVER, NEW YORK

*Reg. U. S. Pat. Off.



message from the President

Know What Is Evil

THE American Way of Life demands a freedom from monopoly. We have always opposed a concentration of power in either public or private hands. We have always fought against abuses which are engendered in monopolistic systems. Our system of government depends on a system of checks and balances. Whenever these checks and balances become over-weighted in any direction, then the "Scales of Justice" no longer function, and decisional evaluations become a mockery of freedom.

Our governmental laws and legislation have been designed to prevent business and industry from becoming monopolistic monstrosities. By the same token our labor statutes were not designed to place monopolistic powers in the hands of the labor unions. These labor statutes were designed to give the right of self-organization to the American workingman. They gave the workingman the right to join unions, but did not, or could not, direct the employees to join or to refrain from joining labor organizations or any particular labor union.

Congress did not, nor did it intend to, create or protect monopolistic labor unions. It did not mean that these organizations were to use monopolistic powers over the supply of labor, and thus impose their will on the government, the agencies of the government, the public, business, and employees, both union and non-union alike. These laws were instituted to protect the creation and operation of labor organizations. They did not give these organizations ruthless and arbitrary powers. These groups must respect the rights and duties of all concerned. They must accept the same responsibilities imposed on any group in a free democracy. It is the right of individuals to form and join unions, and it is the duty of the unions and government to see that justice prevails and freedom is not endangered. Anarchy in labor is just as wrong as anarchy in government. The accumulation of unrestrained powers in the hands of unions, and the abuses of this power by labor leaders, has led to monopolistic practices. Freedom, at times, has been replaced by force and coercion. The individual rights of freedom are violated, and the fundamental principles of equal protection under law for all individuals, seems to have been forgotten, or at least, not fully employed.

The right of an individual or a group of individual employees to bargain with an employer concerning wages, working conditions, etc., and the refusal to work or to strike, is an accepted fact. It is the duty of both the employee and the employer to acknowledge the rights of each other. The employer and the employee must learn the duties and rights of each other and respect them.

Some national and international unions have shunned the rights and duties of both the employee and employer, and have become giant monopolies. They are affecting the general economy of the nation and are striving for political dominance as well. The very essence of freedom can be at stake. The welfare of the nation depends on honesty within the government, industry and labor. Monopoly in any one of these is wrong.

Monopoly in the government, labor or industry can and will lead to the downfall of freedom in these United States of America.

The apparent immunity from legal responsibilities by labor unions and the Government should be a concern of every citizen in this nation. Both are becoming monstrous monopolies. Both are ever plodding down the path to Socialism to the inevitable brink of destruction, and to the loss, of freedom.

To quote Baltaser Gracian:

"Know what is evil, no matter how worshipped it may be. Let the man of sense not mistake it, even when clothed in brocade, or at times crowned with gold, because it cannot thereby hide its hypocrisy, for slavery does not lose its infamy, however noble the master; the vices may stand

high, but they are not high: some see a great man afflicted with this vice or that; but they do not see that he is not great because of it but only in spite of it. The example of the man high up is so convincing, that even his ugliness proves engaging, so that flattery at times mimics them, not seeing, that if in the great such things are overlooked, in the small, they are despised."

E. B. Vrsek M.D.

IN THE BOOKS

(Continued from Page 324)

PRINCIPLES OF OPHTHALMOSCOPY, by John K. Erbaugh, published by Charles C. Thomas, Springfield, Ill. 1958, 64 pages, $5.50.

This thin volume is designed for the general physician or house officer who should better organize and interpret ophthalmoscopic findings in regard to normal variations and major disease processes. The text is generally quite accurate but suffers slightly from over-simplification and the avoidance of less common entities. Schematic diagrams are unduly crude and in poor color; they are further complicated by the frequent omission of titles.

Five beautifully executed fundus drawings are reproduced from previously published material of the American Optical Company and along with a scattering of good line sketches rescue the illustrative features of the monograph. The inclusion of four clinical case examples helps to drive home didactic points, but the citing of actual cases would be far preferable to the manufacture of hypothetical ones.

The separation of sclerotic or fixed organic changes from purely hypertensive or potentially reversible spastic changes in the retinal arterioles is to be commended. This clarification of thinking should be adopted by any observer of the fundus vessels. The recommendation of simple ophthalmoscopes, free of unnecessary filters, and the use of largest battery handles (or transformer power sources) is strongly endorsed. The interpretation of color in fundus details is a direct function of illumination, and will be inaccurate in dim or yellow light. There is a need for this little book which can be profitably read while waiting for a late plane or for dinner guests to arrive.

ARTHUR H. KEENEY, M.D.

The fifty-seventh annual meeting of the Medical Library Association will be held in Rochester, Minnesota, from June 2 through June 6. "Advances in Medical Library Practice" will be the theme of the meeting which will have its headquarters in the Hotel Kahler. Mr. Thomas E. Keys, librarian of the Mayo Clinic, is convention chairman and letters of inquiry should be addressed to him.

"the most critical inspection yet devised for an eye-glass lens"--

Your prescription filled by us will be processed to the prescription with first quality materials; the glass and surfaces will be tested for precision of workmanship—and your lenses checked for accuracy of power —only a perfect lens passes the Southern Optical test.



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ARTIFICIAL EYES
(Custom Plastic—Glass)

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GUILD OPTICIANS

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Pleasant tasting

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PIPERAZINE

SYRUP · TABLETS · WAFERS

Eliminate **PINWORMS IN ONE WEEK**
ROUNDWORMS IN ONE OR TWO DAYS

PALATABLE • DEPENDABLE • ECONOMICAL

'ANTEPAR' SYRUP – Piperazine Citrate, 100 mg. per cc.
'ANTEPAR' TABLETS – Piperazine Citrate, 250 or 500 mg., scored
NEW **'ANTEPAR' WAFERS** – Piperazine Phosphate, 500 mg.

Literature available on request

BURROUGHS WELLCOME & CO. (U.S.A.) INC., Tuckahoe, N. Y.



in peptic ulcer

Results with "... antacid therapy with DAA are essentially the same as ... with potent anticholinergic drugs."

Alglyn®

Dihydroxy aluminum aminoacetate, N.N.R.

In recent years, a number of new synthetic anticholinergic drugs with numerous and varying side effects have been investigated for treatment of peptic ulcer. However, a double-blind study conducted recently by Cayer et al suggests that the use of such anticholinergic drugs is seldom necessary. The authors concluded that "The percentage of 'good to excellent' results obtained in patients on continuous long-term antacid therapy with DAA (74%) is essentially the same as that previously noted in ulcer patients treated under similar conditions with potent anticholinergic drugs alone."

The authors' choice of dihydroxy aluminum aminoacetate (DAA) was based on the fact that "the tablet form of DAA (is) more active than a variety of straight aluminum hydroxide magmas." They further commented that "Because of the convenience of tablet medication as compared with the liquid gel—a convenience which in the use of other tablets is gained at the expense of therapeutic effectiveness—dihydroxy aluminum aminoacetate was used exclusively."

ALCLYN (dihydroxy aluminum aminoacetate) Tablets are supplied in bottles of 100 tablets (0.5 Gm. per tablet).

BRAYTEN PHARMACEUTICAL COMPANY • *Chattanooga 9, Tennessee*

'DIURIL'

(CHLOROTHIAZIDE)

in

EDEMA



Start therapy with one or two 500 mg. tablets of 'DIURIL' once or twice a day.

BENEFITS:

- The only orally effective nonmercurial agent with diuretic activity equivalent to that of the parenteral mercurials.
- Excellent for initiating diuresis and maintaining the edema-free state for prolonged periods.
- Promotes balanced excretion of sodium and chloride—without acidosis.

Any indication for diuresis is an indication for 'DIURIL':

Congestive heart failure of all degrees of severity; premenstrual syndrome (edema); edema and toxemia of pregnancy; renal edema—nephrosis; nephritis; cirrhosis with ascites; drug-induced edema. May be of value to relieve fluid retention complicating obesity.

SUPPLIED: 250 mg. and 500 mg. scored tablets 'DIURIL' (chlorothiazide); bottles of 100 and 1,000.

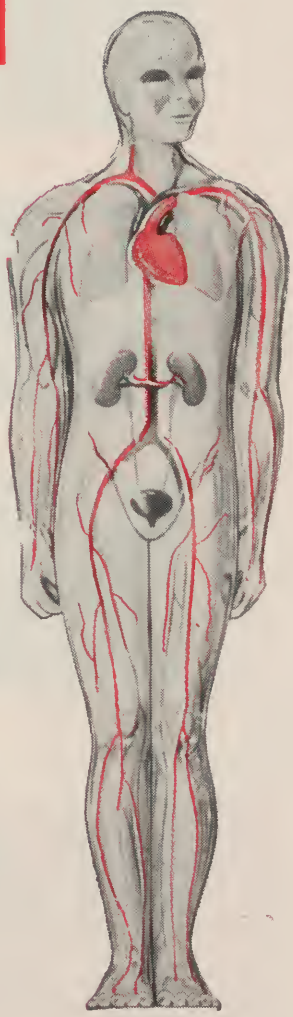
'DIURIL' and 'INVERSINE' are trade-marks of Merck & Co., Inc.

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Division of MERCK & CO., INC., Philadelphia 1, Pa.

as simple
as 1-2-3
in

HYPERTENSION



1 INITIATE 'DIURIL' THERAPY

'DIURIL' is given in a dosage range of from 250 mg. twice a day to 500 mg. three times a day.

2 ADJUST DOSAGE OF OTHER AGENTS

The dosage of other antihypertensive medication (reserpine, hydralazine, etc.) is adjusted as indicated by patient response. If the patient is established on a ganglionic blocking agent (e.g., 'INVERSINE') this should be continued, but the total daily dose should be *immediately* reduced by 25 to 50 per cent. This will reduce the serious side effects often observed with ganglionic blockade.

3 ADJUST DOSAGE OF ALL MEDICATION

The patient must be frequently observed and careful adjustment of all agents should be made to determine optimal maintenance dosage.

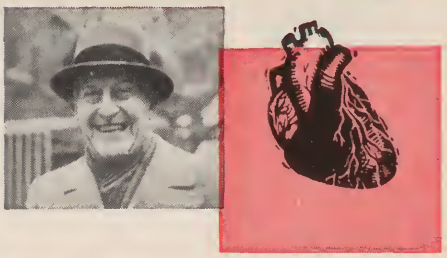
BENEFITS:

- improves and simplifies the management of hypertension
- markedly enhances the effects of antihypertensive agents
- reduces dosage requirements for other antihypertensive agents—often below the level of distressing side effects
- smooths out blood pressure fluctuations

INDICATIONS: management of hypertension

Smooth, more trouble-free management of hypertension with 'DIURIL'

in each of these indications for a tranquilizer...



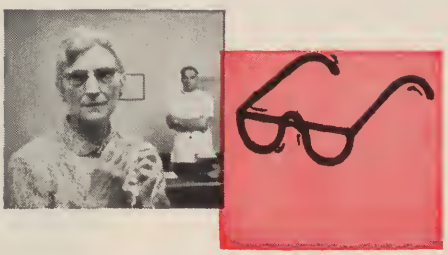
SR is a cardiac patient. His doctor put him on ATARAX because it is an anti-arrhythmic and non-hypotensive tranquilizer. (+)



Other tranquilizers added to PN's g. i. discomfort (he has ulcers). But now his doctor has him on ATARAX because it lowers gastric secretion while it tranquilizes. (+)



Asthmatic JL used to have frequent tantrums followed by acute bronchospasm. Her family doctor tranquilized her with ATARAX because it is safe, even for children. (+)



Senile anxiety and persecution complex dogged Mrs. K. until her doctor prescribed ATARAX Syrup. It tastes good, and it's a perfect vehicle for Mrs. K's tonic. (+)

Dosage: Children, 1-2 *10 mg.* tablets or 1-2 tsp. Syrup t.i.d. Adults, one *25 mg.* tablet or 1 tbsp. Syrup q.i.d.

Supplied: 10, 25 and 100 mg. tablets, bottles of 100. Syrup, pint bottles. Parenteral Solution, 10 cc. multiple-dose vials.

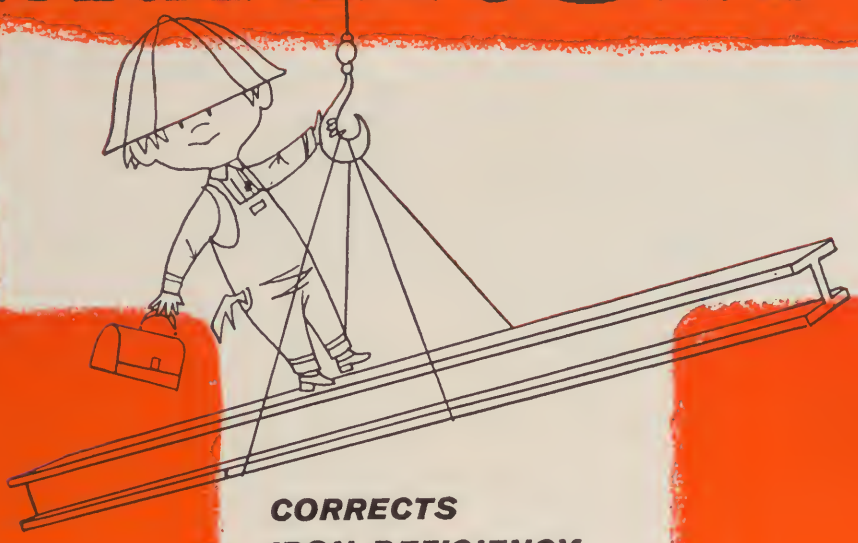
...ATARAX® (BRAND OF HYDROXYZINE) gives you an extra benefit

Rx PFIZER

New York 17, New York
Division Chas. Pfizer & Co., Inc.

new INCREMIN* with IRON syrup

LYSINE-VITAMINS



CORRECTS IRON DEFICIENCY AS IT STIMULATES APPETITE

DELICIOUS CHERRY FLAVOR
DESIGNED TO APPEAL TO
BOTH CHILDREN AND ADULTS

PARTICULARLY FOR CHILDREN



Supplies essential Iron as ferric pyrophosphate, highly stable, well-tolerated, readily absorbed; essential vitamins B_1, B_6 and B_{12}, established as appetite stimulants; essential l-Lysine for greater protein economy in the pediatric diet.

INCREMIN Syrup

FORMULA: Each teaspoonful (5 cc.) contains:

l-Lysine HCl	300 mg.
Ferric Pyrophosphate (Soluble)	250 mg.
Iron (as Ferric Pyrophosphate)	30 mg.
Vitamin B_{12} Crystalline	25 mcgm.
Thiamine Mononitrate (B_1)	10 mg.
Pyridoxine HCl (B_6)	5 mg.
Alcohol	0.75%

Average dosage is 1 teaspoonful daily.
Available in bottles of 4 fl. oz.

*REG. U. S. PAT. OFF.

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Lederle

WASHINGTON NEWS DIGEST

Washington, D. C.—At least for this year, it appears that Congress will keep its hands off tranquilizer drug regulation. The issue was studied by a House Government Operations Subcommittee in three days of hearings, where experts on tranquilizers testified. With few exceptions, they told the subcommittee they thought the situation was well in hand now and that no new legislation was needed.

The investigation grew out of reports that (a) some tranquilizer manufacturers are misleading doctors in literature describing the drugs and in advertisements in medical journals, and (b) somehow the general public is reading these claims and prevailing on doctors to prescribe the drugs when they aren't indicated medically.

A report, when issued by the full committee later in the year, is expected to point out some of the danger areas explored at the hearings, but not to make a strong demand for further federal regulation in this area.

Dr. Leo Bartemeier, chairman of the American Medical Association's Council on Mental Health, told the subcommittee under Rep. John Blatnik (D., Minn.) that he knows of no "gross misrepresentation" of the drugs, and that it is his understanding that the producers subject the drugs to careful tests before releasing them to the medical profession. Dr. Bartemeier explained that the drugs are helpful in bringing mental patients in contact with reality, thus preparing them for treatment.

Dr. Robert H. Felix, head of the National Institute of Mental Health, agreed that the tranquilizers are "a new source of hope" for patients and psychiatrists alike, but he pointed out that their success actually highlighted the acute shortage of trained psychiatric personnel in public mental hospitals. He said that too many patients, after being made ready for treatment through use of the drugs, have to wait for long periods until overworked psychiatrists can start their treatments.

Two other government witnesses also said no new legislation is needed. They were Dr. Albert H. Holland, Jr., medical director of Food and Drug Administration, and Commissioner Sigurd Anderson of the Federal Trade Commission. They argued that even the most questionable wording does not mislead the wary physician, and that there is no record in 20 years of any drug advertisements sent exclusively to the profession that carried false or misleading claims.

Dr. Nathan Kline, research director for the New York State Department of Mental Hygiene, said there may be occasional abuses or "honest mistakes," but that they are not frequent enough to justify new legislation.

Dr. Kline did suggest that it might be wise to give Food and Drug Administration full authority over policing of advertising. At present FDA is responsible for checking on claims on labels or inclosed literature, and Federal Trade Commission for checking advertisements. The advantage would lie in FDA's authority to move faster against producers in case of abuse.

Among the few who called for new control legislation was Dr. J. Murray Steele, who headed a New York Academy of Medicine study of tranquilizer advertising.

In contrast to evidence from witnesses before the Blatnik subcommittee, Dr. Steele said a number of psychiatrists had told his panel that the ads often serve more to mislead than to guide physicians.

NOTES:

A four-day Washington conference of representatives of organizations concerned with nursing homes and homes for the aged agreed on the need for federal legislation to help renovate and build facilities. Left open was the question of whether aid should be through grants or mortgage guarantees. Surgeon General Burney told the group that lack of good nursing homes was keeping "tens of thousands of older patients in general hospitals for prolonged periods beyond the time when they need or even can benefit from 'full-dress' hospital services."

Dr. David B. Allman, AMA president, has warned the country of food faddists and diet quacks. Speaking at the National Food Conference, he said too many people put off seeing a physician while accepting certain health foods, herb mixtures or "some other phony remedy." AMA and Food and Drug Administration are working on a program on the dangers of food quackery. This includes a television film.

Senator Lister Hill (D., Ala.), chairman of the Senate Appropriations subcommittee that handles the HEW budget, is convinced work should be pushed on the new National Library of Medicine building. Only planning funds have been voted to date. Hill wants the administration to indorse $7 million for the library in the face of deterioration of the present structure. He cites an editorial in the Journal of the AMA on the need for action.

Dr. F. J. L. Blasingame, AMA general manager, has informed the House and Senate Armed Services committees of AMA support for continuing the 1956 incentive pay act for medical officers. The House group is considering legislation to change the base pay of all military personnel; which would cut down the special pay for experienced medical officers.

The House Government Operations Committee also has been busy in another field. Reporting on its long hearings of last year on advertising of filter tip cigarettes, the group declared: "The cigarette industry has done a grave disservice to the smoking public initially, blatantly and, more recently, very subtly publicizing the filter tip smoke as a health protection."

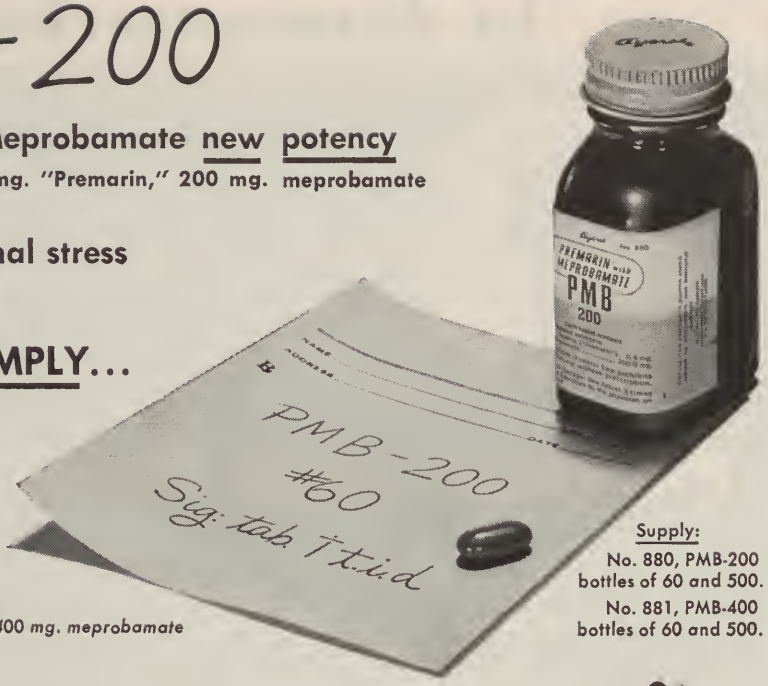
PMB-200

"Premarin" with Meprobamate new potency

Each tablet contains 0.4 mg. "Premarin," 200 mg. meprobamate

For undue emotional stress in the menopause

WRITE SIMPLY...



Also available as PMB-400 (0.4 mg. "Premarin," 400 mg. meprobamate in each tablet).

Supply:
No. 880, PMB-200 bottles of 60 and 500.
No. 881, PMB-400 bottles of 60 and 500.

AYERST LABORATORIES • New York 16, New York • Montreal, Canada

"Premarin®" conjugated estrogens (equine)

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5830



release from pain and inflammation

with BUFFERIN® IN ARTHRITIS

salicylate benefits with minimal salicylate drawbacks

Rapid and prolonged relief—with less intolerance. The analgesic and specific anti-inflammatory action of BUFFERIN helps reduce pain and joint edema—comfortably. BUFFERIN caused no gastric distress in 70 per cent of hospitalized arthritics with proved intolerance to aspirin. (Arthritics are at least 3 to 10 times as intolerant to straight aspirin as the general population.[1])

No sodium accumulation. Because BUFFERIN is sodium free, massive dosage for prolonged periods will not cause sodium accumulation or edema, even in cardiovascular cases.

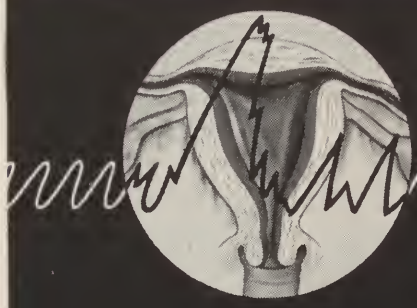
Each *sodium-free* BUFFERIN tablet contains acetylsalicylic acid, 5 grains, and the antacids magnesium carbonate and aluminum glycinate.

Reference: 1. J.A.M.A. 158:386 (June 4) 1955.

ANOTHER FINE PRODUCT OF BRISTOL-MYERS

Bristol-Myers Company
19 West 50 St., New York 20, N. Y

in dysmenorrhea



Pavatrine® with Phenobarbital

125 mg. 15 mg.

- *relaxes the hypertonic uterus thus relieving pain*
- *furnishes gentle sedation*

Dosage: one tablet three times a day beginning three to five days before onset of menstruation.

SEARLE



The purity, the wholesomeness, the quality of Coca-Cola as refreshment has helped make Coke the best-loved sparkling drink in all the world.

DRINK Coca-Cola REG. U.S. PAT. OFF.

SIGN OF GOOD TASTE

WHEN YOU TREAT INFECTIONS IN PATIENTS SUCH AS THESE

- debilitated
- elderly
- diabetics
- infants, especially prematures
- those on corticoids
- those who developed moniliasis on previous broad-spectrum therapy
- those on prolonged and/or high antibiotic dosage
- women—especially if pregnant or diabetic

the best broad-spectrum antibiotic to use is

MYSTECLIN-V

Squibb Tetracycline Phosphate Complex (Sumycin) and Nystatin (Mycostatin) — Sumycin plus Mycostatin

for practical purposes, Mysteclin-V is sodium-free

for "built-in" safety, Mysteclin-V combines:

1. Tetracycline phosphate complex (Sumycin) for superior initial tetracycline blood levels, assuring fast transport of adequate tetracycline to the infection site.

2. Mycostatin—the first safe antifungal antibiotic—for its specific antimonilial activity. Mycostatin protects many patients (see above) who are particularly prone to monilial complications when on broad-spectrum therapy.

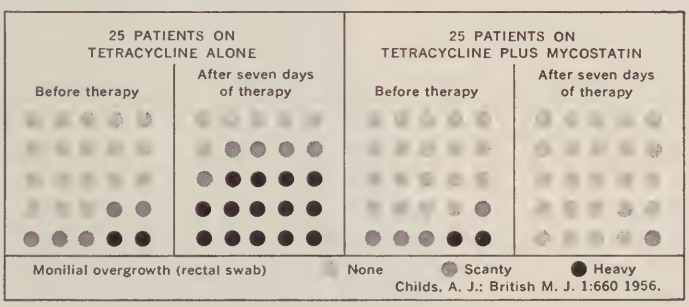
Capsules (250 mg./250,000 u.), bottles of 16 and 100. *Half-Strength Capsules* (125 mg./125,000 u.), bottles of 16 and 100. *Suspension* (125 mg./125,000 u.), 2 oz. bottles. *Pediatric Drops* (100 mg./100,000 u.), 10 cc. dropper bottles.

SQUIBB

Squibb Quality—the Priceless Ingredient

"MYSTECLIN, ® "MYCOSTATIN", ® AND "SUMYCIN" ARE SQUIBB TRADEMARKS

MYSTECLIN-V PREVENTS MONILIAL OVERGROWTH



Childs, A. J.: British M. J. 1:660 1956.

PUBLIC HEALTH PAGE

Tuberculin Testing

RUSSELL E. TEAGUE, M.D.
Commissioner of Health, Commonwealth of Kentucky

Tuberculosis continues to be one of the major health problems in Kentucky. It is true that the number of deaths from this disease has had a phenominal decline, but the incidence of new cases found annually remains fairly constant, that is, 1700 to 1800 cases.

Since the recent news releases and articles in medical journals have called our attention to the dangers of excessive radiation, it is probably wise to review the value of tuberculin tests that have long been accepted as a simple and highly specific test for the presence of tuberculous infection.

Doctor Floyd M. Feldmann has called our attention to this in "Tuberculosis Abstracts" for March, 1958. The following is quoted from this publication:

"There is a tendency to think of the tuberculin reaction as an 'all or none' phenomenon, although every pediatrician has learned that there is a wide range of tuberculin sensitivity in any group tested. Usually a tuberculin test is called positive or negative on the basis of size of reaction. If a Mantoux test is done the indurations larger than five or six millimeters in diameter are arbitrarily called positive, but there are many smaller than this which represent some degree of sensitivity. Are these people just a little sensitivity infected with tubercle bacilli? Undoubtedly some are, but there is now good evidence that many represent a cross sensitization with other antigens. Studies now in progress may reveal the nature of the antigen, or antigens, able to produce some tuberculin sensitivity.

These findings give additional emphasis to an earlier study, with graduated dosage of PPD which showed that in tuberculosis patients extremely small doses produce no reactors, but with a gradual stepping up of the PPD strength an increasing percentage was positive until the dose of 0.0001 mg. was reached. At this point practically all persons with tuberculosis had a reaction of five millimeters or more. If the dose was further increased reactions were obtained in large numbers of children who were probably not infected. This, with other studies, indicates that a standard dose of 0.0001 mg. of PPD is satisfactory for most purposes.

The size of the tuberculin reaction may also be of diagnostic and prognostic significance. Recent preliminary studies (unpublished) at the Phipps Institute in Philadelphia indicate that the size of the tuberculin reaction is correlated with the probability of active tuberculosis; the bigger the reaction the more likely it is that active disease is present.

Many observations point up the increasing usefulness of the tuberculin test to the pediatrician. The interpretations of various degrees of tuberculin sensitivity may be summarized as follows:

1. If a child has no reaction to 0.0001 mg. of PPD there is little possibility that he has a tuberculosis infection. Periodic testing, at least annually, would establish the approximate time of tuberculous infection.

2. A low degree of sensitivity with induration under five millimeters (5 mm) in diameter could be the result of some other infection, or an insignificant tuberculous infection. The chance of active disease being present is extremely small.

3. With a reaction over five millimeters in size, the chances increase that active tuberculosis is now present, or will develop. Each child with such a reaction should have a thorough examination to confirm or exclude the presence of an active lesion. Most of such children will not have active lesions but will have an increased risk as they go through the ages 15 to 30; so long-term follow-ups and periodic examinations are important.

Tuberculin testing in private practice will pay an extra dividend in community tuberculosis control by providing leads to active cases which might escape detection otherwise. If the test is positive in a young child, the infection must be recent and its source is likely to be an active case among his close associates. In older children the source of infection may be more remote. The size of the reaction is important here too. Not only are those with larger reactions much more likely to have active tuberculosis, but higher rates of tuberculosis are found among their contacts. The physician can be of help to public health authorities by insisting that all associates of tuberculin reactors receive adequate examination.

The tuberculin test is a relatively simple and inexpensive procedure for determining infection rates in groups of children and adults. If these groups are retested at intervals, trends in the rates of new infection can be detected. It is quite clear from the evidence now available that infection rates have dropped markedly in the last few years in the United States. The need for more accurate measurement of tuberculin sensitivity is increasingly apparent. The only quantitative procedure now available is the Mantoux or intradermal test. The method and material used in the test has been described often and need not be repeated.

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(Continued on Page 389)

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Riseman, J. E. F., Altman, G. E., and Koretsky, S.: Nitroglycerin and Other Nitrites in the Treatment of Angina Pectoris, Circulation (Jan.) 1958.

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1. Russek, H. I.: Postgrad. Med. *19*:562 (June) 1956.

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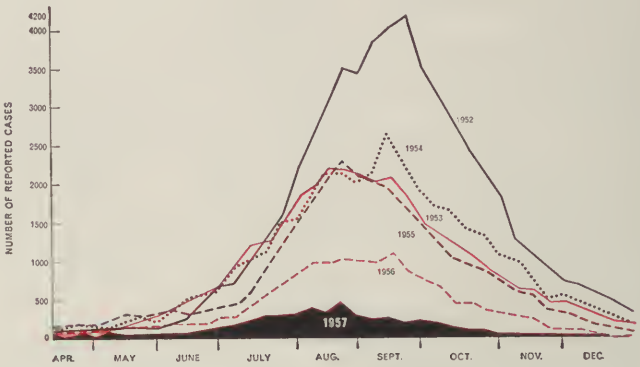
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1. *J. A. M. A.*, 165:*21 (November 23), 1957.*
2. *Department of Health, Education, and Welfare: News Release, October 10, 1957.*

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Carcinoma of the Stomach*

ALTON OCHSNER, M.D., AND JOHN BLALOCK, M.D.**
New Orleans, La.

UNTIL very recently carcinoma of the stomach was the most frequent malignant lesion in men. Although it is presently superseded by bronchogenic cancer, it is still an important lesion because of its lethal characteristics. In contradistinction to bronchogenic cancer, which is a relatively new disease that has become frequent only in the past thirty years, gastric cancer is as old as antiquity and the writings of the ancients demonstrate that gastric cancer was well known to them. The incidence of cancer of the stomach is probably not decreasing, but remains about the same.

In our experience at the Ochsner Clinic,[9] one in every 555 patients admitted to the hospital had a malignant lesion of the stomach and one in every 588 had a gastric carcinoma. At the Mayo Clinic, on the other hand, one in every 200 patients admitted had a gastric cancer.[2] There is considerable variation in the incidence of cancer of the stomach according to locality for some reason or other. In Japan and Switzerland, it is extremely high. The latter country is the only place where deaths from gastric cancer exceed uterine and breast cancer in women. The incidence in Switzerland is 176 per 100,000 population. In 1949, 30.7 per cent of the cancer deaths in Switzerland were due to cancer of the stomach.[15] Stocks[13] showed that the death rates in gastric cancer in Japan were twice as great as in England and Canada.

Prognosis

In spite of the fact that it has been a common lesion since the advent of medical history and in spite of its frequency, the prognosis in gastric cancer has not been particularly good. Until relatively recently, the five year survival rate was only about 5 per cent in all patients with the lesion who were admitted to the better institutions in the United States. Lee Clark[4] showed that when the incidence of cancer of the stomach was considered in a metropolitan area (Houston), the five year survival rate in all the cases was 0.8 per cent. It is thus seen that despite the commonness of the disease and the advances made in diagnosis and therapy, the results of treatment have not been good. In fact, there are some who are so distressed about the outlook in gastric cancer that they are of the opinion the condition is hopeless.

Although the outlook has not been good, this fatalistic attitude is certainly not justified. It is our belief that gastric cancer is a curable disease.

It is frequently stated that diagnosis of gastric cancer is easy, because by the presently available diagnostic methods, such a lesion can be recognized in over 90 per cent of cases. Unquestionably if the diagnosis is delayed long enough, it could be made in probably 99 per cent of cases. It is because physicians have been reluctant to institute therapy until a definitive diagnosis has been made that the results in the treatment of gastric cancer have been so disappointing. It is our firm conviction that if the results in the treatment of gastric cancer are to be improved, it will be necessary to treat the disease when it cannot be diagnosed. This paradoxical statement indicates that it is necessary to treat, by surgical extirpation, lesions that are clinically not cancer because when a diagnosis of gastric cancer can be made clinically, the lesion is usually so far advanced that little can be accomplished in a curative way.

*Presented at the Annual Meeting of the Kentucky State Medical Association on September 19, 1957.
**From the Ochsner Clinic, New Orleans, La.

Although many physicians have been concerned about the poor results which have been obtained in the treatment of cancer of the stomach, relatively little attention has been paid to the treatment of lesions which do not appear to be malignant but which may be gastric carcinoma. Considerable emphasis has been placed upon the need for performing more radical operative procedures, and it has been contended that total gastrectomy should be done for all gastric carcinomas. Obviously, in dealing with a malignant lesion surgically, it is essential to remove not only the viscus or that portion of the viscus containing the tumor, but also any areas to which extension might be likely. However, we are convinced, as a result of our experience with malignant lesions located in the distal half of the stomach, that as much can be accomplished with a radical subtotal gastric resection as by total gastrectomy. In patients with lesions in the proximal half of the stomach or those with infiltrative lesions, total gastrectomy is necessary, but unfortunately in the latter group (linitis plastica), a cure is seldom possible.

The reason for the inoperability in most cases of gastric cancer is the delay in instituting definitive therapy. In our series of cases there was an average delay of 8.4 months. Gray and Ward[6] reported an average delay of 7.8 months before a physician was consulted and an additional delay of 6.4 months on the part of the physician before a correct diagnosis was made. Although recently a great deal of emphasis has been placed upon predetermination in malignant disease, suggesting that regardless of the form of therapy the type of tumor determines the outlook, this should not be accepted because generally delay means greater chance of an increased growth of the malignant tumor, a greater chance of extension, and a decreased chance of curability.

There are, of course, individuals with extremely rapidly growing neoplasia in whom early blood-borne metastases occur and in whom no form of therapy will be curative. Conversely, there are tumors which are slow-growing and which produce bulky masses with local extension that can be cured even after long periods of delay, but to generalize on the basis of these two exceptions is not sound. The fact remains that in cancer of the stomach, as in most cancers, early recognition of the disease and the institution of radical surgical therapy will bring about the greatest number of cures, and the acceptance of a fatalistic attitude can do nothing but harm.

Incidence and Duration

We have had 347 cases of malignant gastric lesions at the Ochsner Clinic, of which 96 per cent were carcinoma. The lesion is a disease primarily of males. In our series, 68.5 per cent were males and 31.5 per cent, females. The average age in men was 57.8 years, whereas that in women was 59.9 years. The lesion is primarily a disease of advancing years as are, of course, most carcinomas, the greatest incidence being in the seventh decade, 35.4 per cent, followed in frequency by the sixth decade, 28.3 per cent; the eighth decade, 15.7 per cent; the fifth decade, 12.5 per cent; the fourth decade, 5.2 per cent; and the ninth decade, 1.6 per cent.

The average duration of manifestations among the five year survivors in our series was 11.3 months as compared with 7.6 months for the non-survivors. The longer duration of symptoms in the five year survivors is due to one of several factors. It may mean that these patients originally did not have a cancer, but had a precancerous lesion which subsequently developed into a malignant lesion or it may mean that it was a slow-growing neoplasm from the outset. Although the longer duration of symptoms in the five year survivors than in those who did not survive five years suggests that delay in therapy is of no importance, we believe that such is not the case. The fact that there was a delay of over six months in all cases indicates that little could be expected from therapy except in the fortunate individuals who either had extremely slowly growing cancers or in whom the original symptoms were caused by a benign lesion. There was considerable difference in the weight loss in those that survived and those that did not survive. Eighty-three per cent of the five year survivors had lost weight, an average being 13.9 pounds; whereas in the group that did not survive, 92 per cent lost weight with an average of 26.9 pounds. Thus, weight loss is of importance as a diagnostic and prognostic factor.

The prognosis in gastric carcinoma depends upon the type of lesion. In almost two-thirds of our cases, the lesion was described as being one of diffuse involvement, in 22.4 per cent it was an ulcerative lesion, and in 11.4 per cent it was polypoid. The ulcerative and poly-

poid lesions offer better prognoses than those with diffuse involvement.

Diagnosis

As mentioned previously, it has been stated frequently that gastric cancer can be diagnosed in 90 per cent of cases. A diagnosis of gastric cancer was made on x-ray in 96 per cent of our cases. Although this is probably an indication that our Roentgenographic Department is good, which is true, it is our belief that the outlook would be better in a series of cases if the incidence of correct preoperative diagnosis were lower, because as mentioned previously, whenever a diagnosis of gastric cancer can be made clinically, the lesion is far advanced and chances of a cure are much less. Other methods of diagnosis in gastric cancer are not very helpful. Gastric analysis in about three-fourths of the cases shows a hypoacidity and anacidity, but the absence of anacidity in no way excludes gastric carcinoma and its presence is in no way diagnostic. Gastroscopy is a valuable confirmatory method, but unfortunately a gastroscopist is unable to differentiate between benign and malignant lesions. Even a negative biopsy does not exclude gastric carcinoma, because it simply means that the piece of tissue removed by biopsy is not malignant, but other portions may be. Cytologic examination of the gastric secretions and scrapings are valuable when positive, but are of no value when negative. Unfortunately, they are more likely to be positive in an advanced case in which a diagnosis is not difficult otherwise, but are disappointing in early cases in which differential diagnosis is difficult.

We believe that newly developed and persistent symptoms, such as anorexia and weight loss of ten or more pounds, in any man past 40, must be considered gastric cancer until proved otherwise. Although there will be individuals with such a clinical picture who do not have gastric cancer, a number will. If one waits until a definitive diagnosis can be made clinically, it may be too late to accomplish anything curative by therapy. We are so convinced of the validity of this contention that we believe such an individual should be subjected to exploratory laparotomy in order to confirm or exclude the diagnosis of gastric cancer.

Treatment

There is uniformity of opinion that surgical extirpation is the only form of therapy of value in gastric cancer. As mentioned previously, there has been considerable controversy whether a total gastrectomy should be done in all cases of gastric cancer or whether in certain cases in which the lesion is limited to the distal half of the stomach and is not of the linitis plastica type, a radical subtotal gastrectomy is feasible. Our experience has convinced us that the latter operation is the procedure of choice in those cases in which the lesion is of the non-infiltrative type and is limited to the distal half of the stomach. Radical subtotal gastrectomy consists of excision of the first portion of the duodenum, all the lesser curvature up to within about 6 cm. of the esophagus, an en bloc excision of the gastrohepatic omentum, the gastrocolic omentum, the greater omentum, the spleen, and resection of the gastrolienal nodes, the pericardial nodes, the left gastric and celiac nodes, the subhepatic and subpyloric nodes with careful dissection of the nodes in the hepatic fissure. In this way, a radical en bloc excision of the areas most frequently involved is accomplished and probably little, if any more, will be accomplished by more radical procedures which are attended with far greater risk.

The advantage of this radical subtotal gastrectomy over a total gastrectomy is that these patients usually get along very well postoperatively and have relatively few sequelae in contradistinction to the individuals who have been subjected to total gastrectomy and who frequently are gastric cripples. We believe that the paucity of symptoms in patients who have been subjected to the radical subtotal resection is not due to the gastric reservoir (the remaining pouch is actually no larger than a man's thumb), but to the preservation of a few left vagus fibers.

In our series of cases, 80 per cent were explored. In 13 per cent the lesion was so far advanced that exploration was not justified, and in an additional 6.5 per cent operation was refused. Of the entire group, 37.3 per cent had a resection, 15.8 per cent had palliative subtotal gastrectomy, 5.3 per cent total gastrectomy, and 3.2 per cent palliative esophagogastrectomy. Eleven per cent had curative subtotal resections, 1.6 per cent curative total gastric resection, and 0.4 per cent curative esophagogastrectomy. To recapitulate, 44.1 per cent had palliative operations, 43.3 per cent had exploratory laparotomy or the operation

was not justified or was refused, and only 12.1 per cent had a curative resection. The fact that only 12.1 per cent of the entire group had a resection in which the lesion was apparently limited to the stomach is a good illustration of how advanced the lesions were when the patients were first seen.

Results

As mentioned previously, the results in the treatment of gastric cancer have not been good, largely due to delay in diagnosis. From 1942 to 1950, we treated 196 patients with gastric cancer. One hundred ninety-three (98.5 per cent) of these have been followed. Of this group, 18 (9.4 per cent) survived five years and 175 (90.6 per cent) died within five years after they were seen. We have considered everyone who died as having died of carcinoma, which, of course, is not correct, because only 85 per cent of the general population in this group without cancer survive five years. A study of the cases that survived five years revealed some interesting facts. The survival rate was twice as high among women as men, although men are much more frequently affected with cancer of the stomach than women. Of the 132 men seen and subjected to gastrectomy over five years ago, only 9 survived (7 per cent). Of the 61 women, 9 survived (15 per cent). It is thus seen that although cancer of the stomach is relatively rare in women, the outlook is better than in men.

The type of lesion is of extreme importance in determining prognosis. Of the 175 patients in whom a resection was done over five years ago but who did not survive five years, 73 per cent had a diffuse infiltrative lesion, 19 per cent an ulcerative lesion, and 8 a polypoid lesion. Of the 18 five year survivals, 67 per cent had ulcerative lesions, 22 per cent polypoid lesions, and 11 diffuse lesions. As mentioned previously, ulcerative and polypoid lesions offer a better prognosis than diffusely infiltrative lesions. Of the 175 cases that did not survive five years, 47 per cent had palliative operations (25 per cent resection and 22 per cent other palliation besides resection), 28 per cent had only exploration, in 13 per cent operation was not warranted, 7 per cent refused operation, and in only 5 per cent was the operation done at a time when there was no evidence of extension beyond the stomach. Of the 18 five year survivors, in 72 per cent the lesion was limited to the stomach at the time of operation, but in 28 per cent there was extension beyond the stomach to the regional lymph nodes and adjacent structures. Resection in the latter group, we have arbitrarily designated as palliative, although in many instances a cure is obtained. It is thus seen that extension to lymph nodes and other structures does not necessarily preclude a cure and resection is justified in spite of the fact that the lesion appears to be extensive.

Discussion

Although there are many who believe that the outlook in gastric cancer is so bad that little or nothing can be accomplished from therapy, it is our belief that such pessimism is not justified. Gastric cancer is a malignant disease which is curable in many instances if early therapy is instituted. Unfortunately, the bad results at the present time have been due largely to delay in therapy until the condition can be diagnosed clinically. Because cancer of the stomach is diagnosable at the present time only when it is in the advanced stage, one must not wait before instituting therapy, but lesions which clinically are not cancer should be treated. Gastric polyp is one of the lesions which is definitely known to be precancerous and which should be removed. Another lesion which we believe is precancerous is a gastric ulcer.

Although there is considerable controversy at the present time concerning malignant change in gastric ulcer, we think such does occur. Stout,[14] in 82 gastrectomies performed for cancer, found evidence in 12.4 per cent that the cancer had developed at the margin of a preexisting cancer. Exstroem[5] found evidence that the cancer developed from benign ulcer in 11.5 per cent. We believe that gastric ulcers can and do become malignant. It is known that chronic ulceration on other epithelial surfaces, such as the skin, become malignant and it is easy to envision that an epithelial surface such as the gastric mucosa which is liable to malignant change, can develop cancer on the basis of a chronic ulcer. However, in considering therapy in gastric ulcer it probably makes little difference whether the ulcer undergoes malignant change, because it is impossible, according to present methods of diagnosis, to determine with accuracy whether the ulcerative lesion is benign or malignant. Only by careful examination of many, in fact serial, sections through the ulcer can one

be sure that the lesion is not malignant. The difficulty in determining benignancy in an ulcer of the stomach is illustrated by the fact that the Department of Pathology at Tulane University for twenty years used as a typical example of a benign ulcer, a lesion which subsequently proved to be gastric cancer. The original slides showed no evidence of cancer, but after twenty years when many slides were broken, it became necessary to cut additional sections from the same block. These slides showed definite cancer. If it is possible for a Department of Pathology in a major medical school in the country to use for teaching, cancer of the stomach as a typical example of gastric ulcer, it illustrates how difficult it is to differentiate between benign and malignant lesions.

For this reason, we believe that all gastric ulcers should be excised. Although this is radical, we are convinced it is valid not only because removal of the gastric ulcer, preferably by gastrectomy, removes the lesion which might be malignant or which might undergo malignant change, but also because the results following surgical extirpation of gastric ulcer are better than the conservative treatment of the disease. This is in contradistinction to the treatment of duodenal ulcer. Duodenal ulcer is a disease which should be treated conservatively, and most cases will respond very satisfactorily, the results of conservative therapy being good. On the other hand, the conservative treatment in gastric ulcer fails in from 20 to 40 per cent. Although hemorrhage and perforation are not as great as in duodenal ulcer, when they do occur, they are much more serious.

The fact that the conservative treatment of gastric ulcer is not satisfactory is shown by the experience of Cain and his coworkers.[3] These investigators followed 414 cases of gastric ulcer treated at the Mayo Clinic. The five-year results were as follows: Only 20 per cent had complete relief, 17.2 per cent partial relief, 14.7 per cent were unimproved, and 8.9 per cent were worse, 15 per cent of whom died of cancer and 9 of gastric cancer. In 78 cases in which operation was suggested but refused and in which conservative therapy was used, the results were satisfactory in 11.6 per cent, in 84.6 per cent they were unsatisfactory, in 3.8 per cent they were unknown, and in 12.8 per cent the presence of carcinoma was established. Surgery was subsequently used in 56.1 per cent. In 336 cases in which medical therapy was advised, the results were satisfactory in only 22.6 per cent, unsatisfactory in 72.3 per cent, unknown in 5.1 per cent, and the lesion was found to be malignant in 9.8 per cent. Surgical therapy was subsequently employed in 42.4 per cent of the unsatisfactory group.

The authors concluded that the results of medical treatment of gastric ulcer were not good, because only 85 of the patients obtained complete relief, 309 had unsatisfactory results, 140 had to be operated upon subsequently, 15 of 274 who received only medical treatment died from related medical complaints, and 9 died of cancer. In 9 other patients the gastric cancer was found to be inoperable and in 30 cases death was attributed to complications of benign ulcer or cancer. Cain concluded that the chance of having gastric cancer is one hundred times greater in a person who has a small gastric ulcer than in one who does not. Banks and Zetzel,[1] in a series of 48 cases of gastric ulcer, treated conservatively found only 11 symptom free throughout the period of treatment (an average of two and one-half years) and 8 (16.6 per cent) died of gastric cancer. Hayes,[7] reported that of 427 gastric ulcers which were considered benign and which were treated conservatively, 196 were operated upon after four weeks of therapy and 56 (28.6 per cent) were found to be malignant. Of 231 cases treated medically and followed for five years, 42 (18.1 per cent) were lost to follow-up, 80 (34.6 per cent) were apparently well, 12 (5.2 per cent) died of other causes, and 97 (41.9 per cent) required operation. Of 80 cases in which the operation was done for recurrence of the ulcer or intractability, "25 to 30 per cent" were malignant and the five year survival incidence was only 43.5 per cent. In another group of cases with gastric ulcer treated only a month and then operated upon, the five year survival rate in those which proved to be cancer was 66 per cent. In the cases in which conservative therapy was continued until gastric cancer was clinically diagnosable, the five year survival rate was only 18 per cent! Lampert, Waugh, and Dockerty,[8] in a series of 550 presumably benign gastric ulcers in which gastric resection was done, found that 72 (13 per cent) were malignant.

Because of the almost uniformly poor results obtained in the conservative treatment of gas-

tric ulcer, and because of the impossibility of determining that an ulcerative lesion of the stomach is not malignant, it is imperative that every gastric ulcer should be resected.

Other precancerous lesions which should be treated surgically are certain cases of gastritis. Orator[10] stated that 80 per cent of gastric carcinoma originated in chronic gastritis. It is a well known fact that patients with pernicious anemia and an atrophic gastritis have a higher incidence of gastric cancer than those not so affected. Schell, Dockerty, and Comfort[12] reported 94 cases of gastric carcinoma among patients with pernicious anemia. They emphasized that carcinoma associated with pernicious anemia tends to be polypoid and usually multicentric. It is usually located in the fundic or cardiac area. It is usually of low grade malignancy and frequently there is an admixture of grades. Rubin and Hodges,[11] at the University of Michigan Hospital, found among 1320 cases of pernicious anemia, 35 with gastric cancer, an incidence of 2.5 per cent, which is ten times that found in the general hospital population. It is, therefore, necessary to follow all cases with pernicious anemia to determine if and when a gastric neoplasm develops.

Conclusion

Gastric cancer is an extremely common disease, affecting men primarily, which up to the present time has offered a poor prognosis. The bad results which have been obtained in the treatment of gastric cancer have been due to a delay in diagnosis until the disease is relatively far advanced. The results in the treatment of gastric cancer can be improved by treating surgically, lesions which are not clinically cancer, such as certain cases of chronic gastritis, particularly atrophic gastritis associated with pernicious anemia, gastric polypi, and gastric ulcer. Radical subtotal gastrectomy associated with en bloc excision of the regional lymph nodes is the operation of choice in lesions limited to the distal half of the stomach, except infiltrative lesions. The prognosis in gastric cancer depends upon the time at which the diagnosis is made, the sex, and the type of lesion. Diffusely infiltrative lesions offer a poor prognosis, whereas ulcerative lesions offer a good prognosis. The survival rate is twice as good in women as in men.

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Coarctation of the Aorta: Diagnosis and Surgical Treatment

J. B. Holloway, Jr., M.D.
Lexington, Ky.

THE diagnosis of coarctation of the aorta should be kept in mind when one is examining a young person with hypertension. One of every 300 young persons with hypertension is said to have coarctation of the aorta. Substantiating the diagnosis is not difficult once it has been brought to mind.

Diagnosis

The patient, usually under 30, will have classical symptoms and signs of hypertension with headaches, dizziness and visual disturbances. Only occasionally will he have some disability due to lack of blood supply to the lower half of the body. The blood pressure is quite high in the upper extremities, usually above two hundred systolic, and is absent or barely obtainable in the legs. The femoral pulses will be absent or very faintly palpable. Arterial pulsations below this point are, as a rule, not obtained, whereas the radial pulses will be particularly strong and bounding. The dilated, tortuous intercostal arteries cause a thrill palpable over the back. These abnormal arteries are the collateral circulation around the coarctation and cause notching of the ribs. This notching, which is pathognomonic of coarctation of the aorta, may be seen by roentgenogram. The heart may be enlarged, and there may be a sharp systolic murmur at the base. The hypertension, bounding radial pulse, absent or faint femoral pulse and notching of the ribs are enough to justify a diagnosis of coarctation. None of the more complicated cardiovascular diagnostic steps need be applied.

The electrocardiogram will show a left axis strain. The pathologic change accompanying adult coarctation is rather characteristic. The stricture is just beyond the arch of the aorta and below the left subclavian artery. It will be immediately below the ductus arteriosus. The appearance is fusiform narrowing of the aorta over a distance of some 2 cm. Upon removing the segment, one may see that the obstruction within the lumen is much more severe than appears on the outside. There is usually a diaphragm across the narrowest portion of the aorta with an opening of only 2 or 3 mm. The infantile type, not usually compatible with life, is characteristically higher up, proximal to the left subclavian artery.

What is the Outlook?

When a patient or his physician is faced with the problem of deciding whether to use a major therapeutic measure, one should ask himself the following questions: What is the outlook without the treatment? What is the morbidity and mortality associated with the treatment? What are the ultimate results following the measure under consideration?

For coarctation of the aorta, these questions may be answered with some accuracy. The life expectancy of untreated individuals is 32 years or somewhat less. Only one in ten lives to the age of 50. The mortality rate in 1,600 operative cases of coarctation of the aorta done throughout the country is 8 percent. Most deaths are from disruption of the suture line, bleeding at the operating table or heart failure in the immediate postoperative period. Good to excellent results are obtained in 96 percent of the survivors; only 4 percent show significant hypertension postoperatively. Since relatively few surgeons perform this operation, the mortality rate will be lowered.

Operative Procedure

Technically the operation is relatively straightforward, although it certainly is a potentially dangerous and explosive procedure. The left chest is entered via a posterior-lateral incision. I still prefer to remove one rib and cut another to have a very wide exposure in the event of hemorrhage. Exploration of the chest will usually indicate at the beginning whether or not a prosthesis will be required. Eighty-five percent of these patients may be treated by primary anastomosis, and 15 percent will require prosthesis. Arterial homographs are my choice, although some operators are using a synthetic prosthesis of one type or another with success.

The coarcted segment is mobilized for some 4 to 5 cm. on either side of the coarcted segment. This is the most hazardous part of the operation because of the extremely friable condition of the dilated, tortuous intercostal arteries. They must be divided and ligated to mobilize the aorta properly. These arteries have extremely thin walls and often contain small

aneurysms. After the aorta has been mobilized, it is cross clamped above and below with atraumatic coarction clamps; the coarcted segment is removed, and an end to end anastomosis is carried out with a single layer of silk sutures. In adults, the suture may be continuous, but in children it must be interrupted in a number of places to allow for growth of the lumen of the aorta along with the patient. After the anastamosis, the distal clamp is cautiously removed first; then the proximal clamp is removed.

The release may cause a rather precipitous drop in blood pressure at the time because of the sudden rush of blood to the lower half of the body. The anesthetist should therefore be advised of this move and be prepared to give blood rapidly at this point. There is almost always some bleeding point at the suture lines; it may be easily controlled by a little pressure for a few minutes or if necessary an additional suture. The operation should not be undertaken without some sort of prosthesis on hand, as one is unable to tell in advance if graft will be needed. The series of cases at the Lexington Clinic has been small, but we have had happy results to date.

Summary

The diagnosis of coarctation is easy to make, provided one keeps the condition in mind. Surgical correction is feasible, offers excellent results, and is far preferable to no treatment at all. The mortality rate is acceptable and is being lowered.

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Eosinophilic Granuloma of Bone*

K. Armand Fischer, M.D., and K. D. Leatherman, M.D.**
Louisville, Kentucky

EOSINOPHILIC granuloma is usually a benign lesion of bone involving the reticulo-endothelial structures of bone, and characterized by collections of cells ranging from histiocytes to eosinophils. It has been called an inflammatory reticulo-endotheliosis and histiocystosis X, the X being the unknown causative factors. The lesion may be found singly or in multiple areas of bone, and has been found in the soft tissues in association with bone lesions. The entire true nature of condition is not known. Its present name was given to it by Lichtenstein and Jaffe in 1940. Occasional cases with similar findings were reported in the literature before that time and the name of granulomatous lesions was given to them. It is generally believed now that Eosinophilic Granuloma, Letterer Siwe disease and Hand-Schuller-Christian disease are closely related reticulo-endothelioses and are all simply different manifestations of the same disorder.

Occurrence

The disease affects children very frequently, but has been found in adolescents, older individuals and the aged. The exact etiology of condition is not known, but it is thought to be of inflammatory origin, since it is sometimes found with an acute onset, especially in rib lesions. No definite organism has been demonstrated. A virus causation has been suggested, but no evidence of a specific etiological agent has been found so far. Bone lesions are usually solitary, but may involve a number of bones including the skull, pelvis, ribs, vertebra, and the long bones in order of decreasing frequency of involvement. Single lesions are more common, but multiple lesions are found in about 10 per cent of cases, the skull being involved in about 35 to 40 per cent of the cases.

Diagnosis

This condition usually presents signs and symptoms of moderate severity, but at times the lesion is silent and the diagnosis is made on an incidental x-ray, such as a routine chest film showing rib involvement. Usually there is local pain, swelling and tenderness. In the extremities there is often referred pain. In the skull there are associated frequent headaches, the local lesion may be fluctuant and swollen, and in some instances an actual depression can be felt at the site of involvement. A low grade temperature may be present for a short period of time. With lower extremity lesions, a limp is frequently present. With multiple lesions, several areas will be painful. At times there occur pathological fractures in the ribs and long bones. General malaise is frequently present. Local lesions have been known to break through the cortex into the soft tissues and then erupt through the skin, forming fistulous tracts and then a localized skin granuloma. Dermatologists have reported a papular erythematous skin lesion.



Figure 1
Lesion involving the upper one third of the femur and evidences of a periosteal reaction.

The laboratory findings are usually a leucocytosis with an eosinophilia of variable degree. Blood chemistry determinations are usually

*Presented at meeting of the Kentucky Orthopaedic Society during KSMA Annual meeting September 18, 1957.

**From the Orthopaedic Section, University of Louisville School of Medicine.



Figure 2
A lesion involving the parietal region of the skull.

normal. Tissue studies for bacteria and viruses, cultures, and animal inoculations have all proven valueless to date. The sedimentation rate may be elevated.

The x-ray findings in the skull may reveal a large rarified and punched out area involving both tables of the skull, usually with swelling of the soft tissues. In long bones the lesions frequently are in the medullary cavity first. As they expand the cortex may be rarified and perforated and occasionally is fusiform, with a periosteal reaction. The flat bones show a destructive, dissolving type of lesion and are often mildly cystic. The x-ray findings are not distinctive of this lesion and may simulate Hand-Schuller-Christian or Letterer Siwe disease. Ewings tumor and osteomyelitis must always be differentiated.

Pathology

At surgery the early lesion appears as a soft friable, cystic, yellowish brown and hemorrhagic material. The yellow color is due to necrotic areas. Later, in the healing stage, the tissue may show sequestra with gray connective tissue, and then still later the formation of new bone. Skull lesions with direct invasion into the dura and brain tissues have been reported.



Figure 3
The right eighth rib shows destructive lesion.

Histological examination reveals a granulomatous, destructive lesion with many histiocytes mixed with numerous eosinophilic leucocytes and giant cells. The diagnosis can be confirmed only by a histological examination. A frozen section usually will give the surgeon the correct diagnosis. However, there is frequently a marked variation in the histological pattern. In the later stages of eosinophilic gran-



Figure 4
The pelvis shows a lesion of the superior ramus of the left public bone.

uloma the eosinophiles become scarce and the histiocytes become foamy and assume the appearance of xanthoma cells.

A biopsy is necessary because there are so many characteristics of the lesion which resemble Ewings tumor, multiple myeloma, metastatic malignancy or osteomyelitis.

Therapy

After the diagnosis is established, if other lesions appear, x-ray therapy usually is the means of healing them. At the time of biopsy the lesion is best treated by a thorough curettement, followed by x-ray therapy. After surgery the post operative course is usually uneventful. The healing period may extend from 6 to 8 months. Usually no bone grafting is necessary.

In some cases with solitary lesions other areas may develop after the single lesion has been treated, so it is well to watch the patient carefully. When there is more than one bone lesion one must give a guarded prognosis and advise a long follow-up, since they may be associated with the more serious and fatal lesions seen in Letterer-Siwe disease or in Hand-Schuller-Christian disease.

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Pheochromocytoma, Diagnosis And Treatment

William P. Wharton, M.D.
Lexington, Ky.

THE ability to diagnose and manage problems related to the hypertensive and hypermetabolic effects of pheochromocytoma has largely been due to increased understanding of chromaffin tissue, epinephrine and norepinephrine. Table I shows the basic physiologic effects of these hormones.

Table I

Physiologic Effects of Epinephrine and Norepinephrine

	Cardiac Output	Systemic B.P. Systolic	Systemic B.P. Diastolic	Peripheral Resistance	Heart Rate	Metabolic effect B.M.R.	Metabolic effect Hyperglycemia
Epinephrine	+++	+++	±	———	+	+++	+++
Norepinephrine	±	++	+	+++	+	±	+

The main physiologic action of epinephrine is that of an overall vasodilator with resulting reduction of peripheral resistance. Blood pressure, however, is increased as a result of direct myocardial stimulation, which increases cardiac output. The heart rate is increased initially, but this increase is usually followed by reflex slowing. Norepinephrine, in contrast, has an overall vasoconstrictor action with an increase of total peripheral resistance. It produces either no change or slight reduction in cardiac output; the heart rate is not altered appreciably. Epinephrine increases blood flow in muscle; norepinephrine decreases it. The splanchnic blood flow, as judged by hepatic clearance studies, is increased by epinephrine, while norepinephrine has no effect. Renal blood flow is reduced by both hormones. These hormones also have a hyperglycemic action. That of epinephrine is about eight times greater than that of norepinephrine. The effect on the blood sugar depends on the content of glycogen in the liver and on the transformation of muscle glycogen to lactic acid. Both hormones produce hyperglycemia by breaking down glycogen and affect the same enzyme systems within the liver as does the hyperglycemic factor of the pancreas. The essential difference is that epinephrine causes a rise in blood lactic acid by converting muscle glycogen to lactic acid.

The Clinical Picture

It is possible to visualize five situations which could result with a functioning pheochromocytoma, and all of these syndromes are recognized in the two hundred or more clinical cases of pheochromocytoma described in the literature.

1) Paroxysmal high blood pressure without metabolic change.

2) Persistent high blood pressure which may be indistinguishable from essential hypertension.

3) Paroxysmal high blood pressure with either associated hypermetabolism, hyperglycemia, or both.

4) Persistent high blood pressure with persistent hypermetabolism, hyperglycemia, or both.

5) Persistent hypertension complicated by paroxysmal crises with or without hyperglycemia and hypermetabolism.

The clinical picture produced by the functioning tumor is well known. In cases with paroxysmal hypertension, the attacks are usually characterized by severe pounding headache, tachycardia, anxiety, profuse sweating, pallor, and in the most severe attacks, dyspnea, cyanosis and even acute pulmonary edema may occur. The patient who has persistent hypertension as a result of the tumor may have a clinical picture indistinguishable from that of essential hypertension. Malignant tumors are more likely to cause persistent elevation of blood pressure than to cause paroxysmal hypertension. The most common causes of death are pulmonary edema, acute circulatory collapse, or cerebral hemorrhage during a hypertensive crisis. The metabolic effects of the func-

tioning tumors should be kept in mind, as in a review of 50 cases, 21 patients demonstrated transient hyperglycemia and five patients had frank diabetes.[2,6] Hypermetabolism is a common result of pheochromocytoma; basal metabolic rates well over 100 are seen. There is usually weight loss, heat intolerance, tachycardia, and a picture quite similar to that of hyperthyroidism. The radioactive iodine uptake will aid in differentiating the two conditions.

Report of a Case

J. D., a 31-year-old white mechanic, was seen because of high blood pressure of eleven years duration, which was first discovered when he was rejected for service in the army. Various forms of antihypertensive therapy had produced no result. For 10 to 12 months he noted generalized weakness, exertional dyspnea, heat intolerance and profuse sweating. He had no definite history of chest pain nor congestive heart failure. Headache and visual changes were not prominent in the illness. Systems review and his past medical history gave no helpful information.

Physical examination showed: Temperature 98.2, pulse 82, blood pressure 234/172, weight 162. The fundi were normal. The lungs were clear, the heart was regular, not enlarged and no murmurs were heard. The remainder of the examination revealed no abnormality. The blood pressure was slightly higher in his legs than in his arms.

Laboratory studies showed normal blood counts and urinalysis. The blood urea nitrogen was 14 milligrams per one hundred milliliters of blood. A chest x-ray showed no cardiac enlargement and the lungs were clear.

Hospital Course: The blood pressure stabilized at 240/170 when the patient was at rest in bed. A Regitine® test produced a fall in blood pressure to 160/98 in 3 min. and 35 minutes later the blood pressure was still 170/106. Intravenous pyelograms were normal. Perirenal air insufflation revealed a 4 cm. rounded mass above and slightly medial to the right kidney. The right adrenal was explored through the usual kidney incision and a rounded tumor 4.5 x 4.0 cm. was found. At one point during manipulation of the tumor, the blood pressure rose sharply, but this rise was controlled with intravenous Benodaine.® As the tumor and remaining portion of the right adrenal were removed, the blood pressure dropped to 140/100. The patient was returned to his room with a slow drip of Levophed® to help maintain blood pressure at about 130/70. Twelve hours after operation the Levophed was stopped, and the blood pressure remained stable at 140 - 120/80 - 70. When the patient became ambulatory, the blood pressure rose slightly to 150 - 155/110 - 115. Repeat Benzodioxane and Regitine tests were done, both of which were negative. Microscopic sections showed the tumor to be benign. Over a 2-year follow-up the patient's blood pressure has remained at about 140/90 and he is asymptomatic.

Suspects

In general the following patients deserve very careful consideration for the presence of pheochromocytoma.

1) Thin patients with a history of fluctuating blood pressure.

2) All patients with a history of paroxysmal attacks of headache, chest or abdominal pain, or who exhibit striking vasomotor instability, such as flushing or pallor, particularly if associated with elevated blood pressure.

3) All hypertensive patients under 40 years of age. In the Mayo Clinic series of 50 cases, only three of the patients were more than 50 years old, and 16 were less than 40 years old.

4) All patients who have hypermetabolism without hyperthyroidism.

5) Patients with a short history of hypertension, particularly if the blood pressure elevation is quite striking and the symptoms are very prominent.

6) All patients with grade 3 or 4 hypertension.

7) Patients who show paradoxical response to the ganglionic blocking agents, such as Ansolysen® or hexamethonium. When these agents are given to patients with pheochromocytoma, one may see dramatic elevation of blood pressure rather than decrease in blood pressure.

8) Any patient going into a hypertensive crisis during the induction of anesthesia should be suspected of having pheochromocytoma and Regitine should be given immediately.

Screening Tests

Three screening tests are used as diagnostic aids for pheochromocytoma. Histamine was first used by Roth and Kvale in 1945[5] as a provocative test during normotensive periods in patients who have exhibited paroxysmal hypertension or one of the metabolic effects

suggesting pheochromocytoma. The standard test now used consists of injecting 0.05 milligrams of histamine base intravenously after a suitable base line of blood pressure determinations. Characteristically, the blood pressure falls dramatically within the first 30 seconds. If the test is positive, this fall is followed by a rapid rise in pressure greatly in excess of that produced by the cold pressor test. This drug should not be used in hypertensive patients, as severe hypertensive crises may be induced. Pressures of 300/220 have been observed. Antihistamines do not prevent the histamine response; the mechanism of the histamine response is not known. It is very important that the patient be given no sedatives for at least 12 to 24 hours and no thiocyanate preparations for at least two days prior to the test. Narcotics and tranquilizing drugs may also give false reactions. Many writers recommend that all drugs be omitted for 48 hours before testing.

A second widely used screening agent is Regitine or Phentolamine, which has the advantages of few side effects and when used intravenously the absence of false negative responses.[4] Once again, sedatives, narcotics and tranquilizers may give false positive reactions and should be omitted for at least 24 hours before testing. The recommended dose is 5 milligrams in 1 cubic centimeter of saline solution to be given intravenously. One should not attempt to use larger doses because of the depressor effect on essential hypertension. The criterion for positive results is a fall in blood pressure exceeding 35 millimeters systolic or 25 millimeters diastolic, or a fall from definite hypertensive levels to blood pressures less than 140/90. Occasionally, unexplained false positive tests occur in hypertensive patients, especially if uremia is present.

The third agent in ordinary use is one of the piperoxan drugs, Benzodioxane or Benodaine. This agent has fallen into some disrepute as additional experience has been gained. It has been found that it may produce a rapid rise of blood pressure in patients who do not have a pheochromocytoma as well as many unpleasant subjective sensations of heat, flushing and palpitation. More important is the surprising frequency of false negative reactions with the drug. Most centers now seem to be content with the histamine and Regitine tests as screening procedures.

Pressor Amine Determination

Other methods that are at present not available for general use, are the determination of pressor amines, chiefly epinephrine and norepinephrine, in the blood and the excretion of catechol amines in the urine. The blood pressor amine determination is not particularly difficult, but it is rather time-consuming and requires meticulous attention to detail. It is important to remember that the concentration of pressor amines in the blood is elevated only during the functioning period of the tumor. In the recent series of tumors operated on at the Mayo Clinic, all patients with pheochromocytoma who showed persistent hypertension had a blood concentration of pressor amine greater than 3.5 micrograms per liter. Frequently one combines determination of pressor amine with the histamine test and demonstrates elevation of the blood level to 15 to 20 micrograms per liter during the hypertensive period induced by histamine. False positive elevations are found in Addison's disease, jaundice, lymphoma and hemolytic disorders. It is important that the patient have no rauwolfia drugs for at least a week prior to determination of blood pressor amines as these drugs lower the pressor amine concentration in the blood. The determination of urinary catechol amines is a rather laborious technic and is reserved for the research laboratory at present.

Location and Removal

After a presumptive diagnosis of pheochromocytoma has been made the problem of localizing the tumor remains. Rarely, the tumor may be large enough to palpate. An x-ray of the abdomen may show calcification in the pheochromocytoma although this is much less common than in other types of adrenal tumor. Intravenous pyelograms and retrograde pyelograms are not always satisfactory, as the tumor may not be large enough to distort or displace the renal pelvis. Perirenal or presacral air injection is used by many physicians; others consider it dangerous. False positive results have occured with perirenal air studies and negative results do not exclude the presence of a small tumor. Exploration is the only positive method of determining tumor location. The anterior approach with bilateral exploration is advocated because approximately ten per cent of the tumors are bilateral and occasionally a contra-lateral adrenal may be absent. At surgery while the tumor is being handled and

during its excision the blood pressure may fluctuate very widely. Often a very dramatic rise in blood pressure is noted during induction of anesthesia. After the tumor has been removed the blood pressure may fall precipitously to shock levels. This drop is most often observed in patients in whom persistent hypertension has been present. If the blood pressure does not fall when the tumor is removed, a second pheochromocytoma should be suspected and searched for. If the blood pressure does not fall, a Regitine test should be carried out on the operating table to confirm the presence of a second functioning tumor. One must have Levophed and several ampoules of Regitine ready for immediate use in the operating room.

The postoperative problem is much greater in patients who have had persistent hypertension prior to surgery. Constant observation is mandatory until the blood pressure is stable. During the hypotensive period, a slow intravenous drip of 5 milligrams of Levophed per liter of glucose solution should be kept going. It is important to attempt to keep the systolic pressure only above 100 rather than to a so-called normal blood pressure. One gradually reduces the amount of Levophed given. Occasionally it may take two to four days before Levophed can be withdrawn and the blood pressure remain stable.

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metaphosphate produced markedly higher blood levels than capsules containing either the corresponding base or the hydrochloride alone. In addition, the average levels derived from the tetracycline base or the chlortetracycline base were higher than those produced by the corresponding hydrochloride though lower than those resulting from the mixture containing the base and sodium metaphosphate. In the study with chlortetracycline[6] capsules containing a mixture of the hydrochloride and sodium metaphosphate were also included in the crossover, and the average levels produced by these capsules were the same as with the mixture of chlortetracycline base with sodium metaphosphate.

Although the enhancement of blood levels of tetracycline by phosphate, either complexed to the tetracycline or mixed with the base or the hydrochloride, thus seemed fairly well established, some doubts still remained because certain reliable observers (including many whose results have not been published) failed to confirm the findings with the materials and methods they used. Further confusion seemed to be added by a subsequent report of Welch et al.,[7] who, in repeating a crossover study with capsules of tetracycline phosphate complex and tetracycline hydrochloride with and without sodium phosphate, found [illegible]

"...Tetracycline hydrochloride and citric acid, in an encapsulated mixture, produced higher serum concentrations and greater urinary excretions, and hence better absorption of tetracyclines, than any other preparation studied..."

[illegible] and sodium metaphosphate were published simultaneously with the last mentioned report of Welch et al.[7] These data were based on thoroughly controlled studies both in rats[8] and in man[9] and include additional findings that serve to explain, fairly conclusively, the various discrepancies that have been mentioned.

The experiments in rats[8] were carried out to study the effects of citric acid, dicalcium phosphate, sodium metaphosphate, food, oil and sorbitol on the serum antibacterial activity produced by the administration of tetracycline hydrochloride or tetracycline base. Citric acid administered in equal weight with tetracycline hydrochloride gave the highest concentrations of all the preparations studied. No enhancing effect was obtained from citric acid when given with tetracycline base. Dicalcium phosphate and food resulted in lower, and sodium metaphosphate in higher, serum antibacterial activity than was observed in their absence. Oil and sorbitol did not interfere with tetracycline absorption.

Dicalcium phosphate is widely used as a filler in various capsules, including those of the tetracyclines. The authors cite a large number of other studies that implicate the presence of calcium ions as the cause of the reduced absorption of tetracyclines and show that citric acid can partially neutralize this effect. The depressing effect of food on the serum levels of tetracycline is likewise explained by the goodly amount of minerals contained in commercial laboratory diets, and they postulate that the multivalent cations may be responsible for the poorer absorption of the drug. The authors could not explain the failure of citric acid to enhance serum concentrations when administered with tetracycline base in contrast to its marked effect when given as the hydrochloride. However, they hypothesized that the ability of citric acid to enhance serum levels of tetracycline is related to its ability to form complexes [illegible] unavailable for [illegible]

[illegible] addendum to the last mentioned paper of [illegible]ch et al.[7] indicates that in their study the capsules of tetracycline hydrochloride, chlortetracycline hydrochloride and tetracycline phosphate complex all contained dicalcium phosphate as a filler, whereas the capsules containing citric acid and sodium hexametaphosphate did not contain any dicalcium phosphate. This could clearly explain the discrepancies noted in that study. Likewise, the inconsistencies in other studies may very well have been due to the presence of calcium as fillers in some of the capsules and not in others.

This, however, fails to explain the most recent findings of Welch and Wright,[10] who compared the absorption of three capsules, each containing 250 mg. of oxytetracycline hydrochloride — one without any adjuvant, one with 250 mg. of citric acid and the third with 380 mg. of sodium hexametaphosphate; no other filler was contained in any of these capsules. In triple

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Migratory Thrombosis as an Indication of Visceral Cancer

William T. Rumage, Jr., M.D.
Louisville, Ky.

THE purpose of this paper is to present an illustrative case report and a modest review of the literature on the association of non-malignant periphreal thrombosis and visceral carcinoma. Prescntation of this material may be of service in broadening the concept of association of these conditions which has occurred with increasing frequency in the past few years and reaffirming the opinion that patients with spontaneous thrombophlebitis do have a significant incidence of malignant disease.

An Illustrative Case

G. K., a white man fifty-five years of age was referred because of pain in both lower legs. The present illness was of several weeks' duration and began in the left leg and recently developed in the right. There was no history of trauma and the patient was active in his own grocery store until recently; remaining at home because of the pain on walking. In the past history, the patient had a mild prostatitis and chronic constipation but had been examined thoroughly by very capable individuals and had been cleared for any serious disease. Additionally, the patient had been operated on many years ago for appendicitis and in the more recent past, had a coccygectomy following direct trauma. On physical examination, the patient was a short, obese man looking his stated years and in some distress. Physical findings included a well-healed right lower quadrant incisional scar and a scar at the base of the spine. For the present illness, both calves were tender; the left superficially so and the right on deep palpation. On examination in more detail, there was a superficial vein of the left calf which was occluded. There was very little inflammatory reaction at the site of the occlusion. On the right side there was no evident occlusion on inspection, but on palpation there was tenderness in the calf muscle and a positive Homan's sign. There were no saphenous varices remarkable. In addition, the right supraclavicular fossa was not as deep as the left.

The patient was admitted to the hospital and diagnostic work-up completed. Chest X-ray and upper G.I. series, barium enema, I.V. pyelograms and cystoscopy were negative. Biopsy of the right supraclavicular space revealed metastatic mucinous secreting carcinoma, primary not determined. The symptoms of the patient's vascular disease eventually subsided and he was discharged, only to return with symptoms as before. Bilateral paravertebral lumbar blocks were helpful in relieving the patient of his symptoms. However, when he was ready for discharge, another episode of occlusion occurred. Anti-coagulants were employed but were not effective in recovery even though dosage was pushed to a point that the patient developed nasal and urinary bleeding. Eventually the patient recovered and was discharged; he returned to work and was doing well until several months later. Again peripheral occlusion of the lower extremities developed. The patient was admitted to the hospital again, developed mediastinal compression and pericardial effusion and died very quickly. Autopsy revealed a very small carcinoma of the lung in the periphery of the right lower lobe with metastases to the paratracheal nodes. Post mortem review of the chest X-rays did not reveal the primary lesion.

Historical Background

As a result of this experience, a review of the English literature on the subject was undertaken. About one hundred years ago, Armand Trousseau said before one of his classes, "When you are undecided about the nature of a disease of the stomach, when you hesitate between a chronic gastritis, a simple ulcer, and a carcinoma, a phlegmasia alba dolens occurring in the leg or arm will put an end to your indecision and you will be able to assert positively that a carcinoma is present. I have shown you analogous cases in my wards and I have asked you to notice that this obliterative phlebitis did not pertain exclusively to carcinoma of the stomach and that it might occur with cancer affecting any internal organ whatever."

Trousseau was a master clinician, professor of the Paris faculty and especially interested in laryngeal tuberculosis and the application of tracheostomy, thoracentesis and intubation. Interestingly enough, Trousseau himself developed migratory thrombosis in the preliminary stages of a gastric carcinoma to which he

*Instructor in surgery, U of L School of Medicine.

eventually succumbed.

Thirty years elapsed before Osler commented on the combination of visceral cancer and peripheral thrombosis and reported two cases. The subject lay dormant for another thirty years until Helen Sproul wrote an article based on 4,258 consecutive autopsies at Presbyterian Hospital. Her article primarily indicted the pancreas as the most frequently responsible visceral carcinoma. Since then there has been an increased flow of reports associating the two conditions so that it was possible to collect, with the above cited cases, a total of one hundred-two patients reported in the literature. See Figure #1.

Primary Sites of Visceral Carcinoma Associated with Multiple Thrombophlebosis in order of Frequency

Pancreas	41	Prostate	2
Lung	22	Breast	1
Stomach	14	Liver	1
Ovary	8	Lymphosarcomatosis	1
Uterus	6		
Colon	3	Chronic Lymphatic Leukemia	1
Gallbladder	2	TOTAL	102

Figure 1

Pathological Pattern

The pathological pattern gradually was established. This is not the marantic thrombosis of terminal carcinoma; rather, this is the occurrence of multiple superficial or deep thrombosis as a fore-runner of visceral cancer or a manifestation of its early stages without any of the obvious local or systemic factors we usually anticipate with thrombosis; such as trauma, varicosities, infection (local or systemic), prolonged immobilization or general debility. The occlusion may involve arms or legs. It is rapid in onset, short of duration, recurring and refractory to treatment. There is little febrile response and the white count is usually normal. There is little inflammation locally and rarely any associated arterial involvement. Pulmonary emboli may occur because of the bland nature of the clot and may eventually be fatal. Antibiotics don't help and anticoagulants are usually ineffective even when pushed to the point of dangerous hemorrhage and this frequently serves as a further diagnostic clue. The most frequently questioned diagnosis in the differential is thromboangiitis obliterans. Microscopic section of the thrombosis under discussion is characteristic because of the minimal fibroblastic reaction with very little inflammatory reaction in the media or adventitia.

Pathogenesis

The question immediately arises as to why should patients with visceral carcinoma have venous occlusion. Before that question can be answered, one probably needs to consider why blood clots occur in the circulatory system of any patient and the answer is probably three part: one, because of stasis; secondly, because of vessel wall injury and thirdly, because of alteration in the clotting mechanism. Therefore, returning to the previous question, cancer causes venous occlusion because of: direct invasion from the primary tumor, direct involvement from blood-born metastases, occlusion by pressure rather than penetration from the primary or secondary lesions and because of alteration in the clotting mechanism initiated by tumor metabolism. In these cases the peripheral thrombosis on microscopic examination does not demonstrate any evidence of malignant cells present and, secondly, these patients do have spontaneous remissions, fortunately. Accordingly, we are left with alteration in the clotting mechanism as the probable causative factor. See Figure #2.

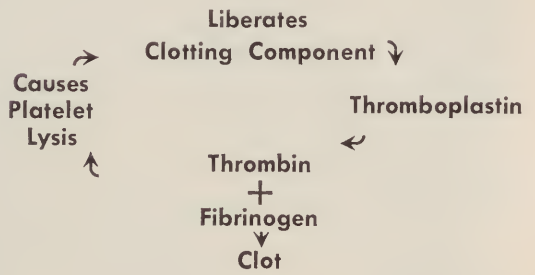


Figure 2

On numerous occasions increase in the adhesiveness of blood platelets has been demonstrated but not universally so. The vast majority of the tumors with which this phenomenon occurs are mucinous secreting epidermoid carcinomas. That these patients can be helped has been demonstrated recently. Although the visceral lesions are usually not therapeutically resectable, palliative excision of the primary will frequently result in an abrupt termination of the peripheral thrombi and subsequently a more comfortable patient even though the metastases are present.

Conclusion

In conclusion, a syndrome of visceral carcinoma and peripheral venous occlusion has been presented and an example given. Although the pancreas is still the number one organ of etiology, consideration obviously should be extended to all viscera. Thorough investigation is encouraged for a patient in the cancer age who presents himself with repeated thrombosis but none of the usually accepted etiological factors. Although the peripheral lesion is difficult to treat, relief can be afforded in some instances by treatment of the primary lesion. The occlusion is dependent possibly on some alteration in blood coagulability.

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Dermabrasion in the Treatment of Acneform and Other Types of Scarring

MAURICE T. FLIEGELMAN, M.D., AND ADOLPH B. LOVEMAN, M.D.
Louisville, Kentucky

SINCE antiquity, the scar and the blemish have been the distressful concern of the patient and the physician. The first recorded attempt to remove these appears in the Papyrus Ebers (1500 B.C.), and consisted of a Meal of Alabaster mixed with grain and water.

In more recent times the following methods for removal of post-acne scars have been advocated:

Scarification: electrodessication; surgical excision and shaving with motor-powered punches and cylindrical knives; chemical caustics; cryotherapy; abrasion with dental burrs and rasps; skin planing.

The principles of the above techniques, as well as the historical background for them, has been completely reviewed in several recent articles.[1-5]

The sandpaper abrasion technique, while probably the best of the aforementioned methods, has the decided disadvantages of the need for a general anesthesia, hospitalization, and the possibility of the formation of silica granuloma caused by the imbedding of small particles of sand.

For the past several years, we have been using the surgical abrasive technique, employing rotating stainless steel wire brushes and burrs for the removal of certain scars and blemishes. We have used this in removing selected types of post-acne scarring, certain scars and pigmentations caused by trauma, tattoos, xeroderma pigmentosa, and lupus erythematosus. This method of scar removal can be carried out in the physician's own treatment room. It is relatively painless and does not



Figure 1. Moderately severe acneform scarring before planing.



Figure 2. Moderately severe acneform scarring after one planing.



Figure 3. Relatively mild acneform scarring before planing.



Figure 4. Relatively mild acneform scarring after one planing.

require hospitalization.

Equipment and Technique

1. Rotary motor, similar to that used by dentists, to rotate steel wire brushes, burrs or other abrasives, capable of 12,000 - 20,000 RPM.
2. Various sized brushes or rotating abrasives.
3. Refrigerant to be sprayed locally.
4. Cold packs.
5. Postoperative dressings.

Planing is done as an office procedure with an analgesic given beforehand. We usually give 75 - 100 mg. of Demerol® and then refrigerate or "prechill" the face with packs containing 5% propylene glycol in water. This makes the skin less sensitive to the ethyl chloride or freon spray used later. The eyes are protected with cotton.

When the skin has been pre-chilled, a small (6-8 cm. in diameter) circular area is sprayed with the refrigerant anesthetic. Only 20 - 30 seconds are required for freezing and solidification of the skin.

The frozen, scarred surface is then abraded by the revolving, electrically driven brush or abrasive. The rapidity of the revolutions is regulated by a foot pedal, much as in a standard dental apparatus. The revolving brush is placed against the prepared skin, horizontal to the surface, and moved slowly up and down, causing abrasion of the scarred area. After completion of one section, another area is treated in a similar fashion. Both cheeks, forehead, and chin can be treated in one sitting, if indicated.

Following the procedure, there is usually moderate capillary bleeding followed by a serosanguineous discharge for 24 - 48 hours. Immediately after planing, we apply an antibiotic ointment and a sterile gauze or Telfa dressing to the treated areas. The patient is instructed to remove the dressing that night or the following morning. While here is some serous oozing, a crust promptly forms which separates in about one week. The erythema that is produced usually fades in a few weeks.

The average case of mild to moderately severe acne scarring usually requires two such sittings (see Figs. 1 and 2), at about 12 - 16 week intervals. The mildest cases may only need one such sitting (see Figs. 3 and 4), and

the more severe cases may need three or more.

It is important to note that the new skin has a normal appearance and consistency because it contains the orifices (pores) of the original cutaneous appendages.

From the psychologic improvement of persons with unsightly facial scars following this procedure, it seems apparent that surgical planing is an integral part of the treatment of the ravages of these conditions, just as plastic repairs are indicated to improve scars following severe burns or trauma.

Contraindications and Complications

In selecting patients for this procedure, their disease process should be quiescent, mild, or preferably cured. It has been found that superficial, pitted scars are more amenable to therapy than irregular, wavy, deep-seated, "ice-pick" ones. Patients with a keloidal tendency should not be treated.

The complications are relatively few in number. Infection is very rare and easily handled with the present day array of antibiotics. Ridging of the aera may be avoided by improved operative techniques. Milia formation, while common, can be easily dealt with by simple incision and expression. Pigmentary changes are usually transient and disappear in a few weeks time.

Local acne treatment, if indicated, may be resumed 8-10 days following planing.

Summary

1. A brief review of the history of dermal abrasion has been presented.

2. Dermabrasion (planing) is the method of choice in the treatment of the acne scar and other disfiguring lesions.

3. The equipment, technique, contraindications, and complications of the procedure have been discussed.

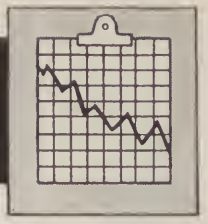
4. The improvement of the psychological attitudes and pursuits of individuals undergoing this corrective procedure is noted.

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CASE DISCUSSIONS
From The
University of Louisville Hospitals



Anesthetic Management Of A Traumatized Patient

Louisville General Hospital

A 40-year-old white male, sustained multiple injuries of the lower thoracic cage, thoracic and abdominal viscera in an automobile crash. He was brought to the Louisville General Hospital receiving ward and transferred immediately to the operating room.

History was not obtained for the patient was apparently intoxicated and quite incoherent.

Physical Examination

The patient was actively moving about on the operating table when he was restrained. He appeared slightly cyanotic and his skin was cool and moist.

BP 150/90—Pulse 88/min and regular—Resp. 44/min and shallow. There was no paradoxical respiration.

Both pupils were slightly dilated but were equal. Extra-ocular movements could not be satisfactorily examined.

Neck—supple with normal range of motion. There was no venous distention.

Thoracic motion was limited on the right side. This was associated with dullness and tympany on percussion. Breath sounds were distant.

There was a small amount of subcutaneous emphysema bilaterally just above the line of diaphragmatic attachment. Bony crepitus could be felt over several fractured ribs bilaterally.

Abdominal examination revealed a large incisional hernia in an old right rectus incision and rigidity of the abdominal musculature. The bladder was catheterized and clear urine was obtained at first, followed by blood tinged urine.

Hospital Course

An intravenous infusion of Dextran 6% in NSS was begun through a large bore catheter cut-down in the right ankle. Cross-matched blood was obtained after 400 cc of Dextran had been infused.

X-ray examination of the chest confirmed the hemo-pneumothorax on the right. A large bore rubber catheter was placed in the right pleural space and connected to underwater drainage. Tachypnea and slight cyanosis persisted despite 100% oxygen inhalation from an anesthesia machine.

Because of multiple fractures of ribs of the lower thoracic cage, increasing abdominal rigidity, and the necessity for an infusion of 1000 cc of whole blood to maintain a stable blood pressure, exploratory laparotomy was performed.

A cuffed endotracheal tube was inserted under topical anesthesia with the patient awake after the pneumothorax had been decompressed. Anesthesia was induced and maintained with cyclopropane-oxygen. At the beginning of anesthesia the BP was 140/84—Pulse 92 and regular. The patient was lightly anesthetized, moving slightly in response to the initial incision. The blood pressure continued to fall despite a rapid infusion of another 1000 cc of blood and a continued light plane of anesthesia. There were numerous adhesions in the peritoneal cavity and considerable delay was encountered in exploring the abdomen. No laceration, hematoma or other injury to abdominal viscera was found.

Adequate ventilation was assured by manual compression of the rebreathing bag throughout anesthesia. The blood pressure continued to fall over the first forty-five minutes of anesthesia and operation despite light anesthesia, and a total of 2000 cc of blood since injury. The BP restituted to 100/50 after having fallen to 50/0, and remained stable for the remaining one hour and fifteen minutes of anesthesia. Closure of the peritoneal cavity was facilitated by the intravenous injection of 80 mgm of succinyl-choline.

The patient was taken to the Recovery Room following operation. He was awake but still irrational and uncooperative. The BP remained stable at 110/70 to 100/60 for the next seven hours. He continued to have a dusky appear-

ance although he was receiving oxygen through a nasal catheter.

An EKG was taken in the Recovery Room because it was thought that the patient might have sustained direct trauma to the heart. The EKG was interpreted as "border-line normal" with "non-specific ST segment changes, maybe digitalis effect." Rhythm regular, rate 86. A pericardial tap performed in the Recovery Room yielded 10 cc of blood.

Vital signs had remained stable during the patient's post-operative course, when he suddenly stopped talking became apneic and cyanotic. Resuscitative measures were of no avail, and he was pronounced dead 10 hours following injury.

Discussion

Eugene Conner, M.D., Professor of Anesthesia: This patient offers several problems in anesthetic management.

1. Recent ingestion of food and drink
2. Hemo-pneumothorax
3. Anesthesia adequate for exploratory laparotomy.
4. Shock-necessitating blood transfusion to maintain blood pressure.

The induction of general anesthesia in a patient who has a full stomach is hazardous because of the possibilty of aspiration of vomitus. The rapid induction of anesthesia with intravenous barbiturates and myoneural blocking agents followed by rapid intubation of the trachea with a cuffed endotracheal tube does not circumvent the problem of aspiration of vomitus. This rapid induction technique will frequently relax the cardiac sphincter and allow stomach contents to be forced into the pharynx by the increased muscle tone which precedes paralysis.

Intubation of the trachea can be accomplished with the patient awake with the same facility as bronchoscopy can be performed under topical anesthesia. When conscious the patient has his normal reflexes to protect him from the aspiration of vomitus.

The inflation of the cuff of the endotracheal tube assures a water tight seal for the prevention of aspiration of vomitus.

The institution of intermittent positive pressure ventilation by either a face mask or through an endotracheal tube can be hazardous to a patient who has an untreated or unrecognized pneumothorax. Positive pressure applied to the tracheobronchial tree can readily force additional air out into the pleural space. A pneumothorax can be rapidly converted to a tension pneumothorax if the pleural space is not decompressed by aspiration or closed thoracotomy and under water drainage. The first definitive step in the management of this patient was the closed thoracotomy for treatment of his traumatic hemopneumothorax.

Anesthesia adequate for an exploratory laparotomy can be provided by most any of the potent anesthetic gases or vapors provided they are judiciously administered. Intravenous barbiturates can be utilized in very small doses but have the disadvantage of being difficult to regulate. Once administered they cannot be reversed. Spinal anesthesia with its attendant sympathectomy is likely to result in the death of a severely traumatized patient.

Cyclopropane was elected for use in this case because it is potent in low concentration and allows the use of a high concentration of oxygen. Cyclopropane also tends to increase the central venous pressure and therefore may assist in providing a greater filling pressure in the heart.

Inhalation anesthetics have the advantage of ready reversibility which is extremely useful in the management of patients who have sustained traumatic injury of undetermined severity and extent.

The use of transfusions of whole blood in the replacement of actual or apparent blood loss and for the restitution of circulatory homeostasis is well recognized. The use of plasma extenders in lieu of whole blood may be a helpful temporary measure. Vasopressors have no recognized place as a substitute for adequate blood replacement.

The patient in this case discussion presents an example of another common cause for failure to maintain an adequate blood pressure, i.e. myocardial damage. In this instance direct trauma to the heart was probably the cause of the myocardial injury. Failure to restitute and maintain blood pressure or to slow the pulse by transfusion of whole blood should indicate continued blood loss, sustained loss of vasomotor tone or an injured myocardium.

Summary

With the continued increase in the number of motor vehicle accidents, we are faced more frequently with the problems exemplified by this case. Adequate care of the patient with

(Continued on Page 388)

SPECIAL ARTICLES

U of K Announces New Method for Evaluating Physical Status of Entering Students

JOHN M. SPRAGUE, M.D.
Director of Health Service, University of Kentucky

THE University of Kentucky Health Service has recently announced a change in the method of its evaluation of the health and physical status of students new on its campus.

Effective in the Fall of 1958, each student who plans to enter the University of Kentucky will be required to submit a completed "Health Report," including the results of a physical examination done at his home. This will be the student's own responsibility, will be done at his expense, and must be sent in with the application for admission.

The method of evaluation of health and physical fitness heretofore used has been a medical history written by the student at the time, and a mass type physical examination. These examinations have been done in assembly-line fashion, each student being examined "in part" by each of several physicians.

Because of the large number of freshmen and transfer students, and the short time available in Orientation Week, just before the beginning of the semester, it has not seemed feasible for one physician at the Health Service to carry out the examination of one student. Nevertheless there are advantages associated with such a method, especially when the examination is done by the student's family physician. About half of all colleges and universities recognize these advantages and rely on physical examinations performed by the physician of the student's choice—usually his family physician who has known him for years and is familiar with the details of his health.

The University of Kentucky Health Service will rely largely on these examinations for health evaluation of its new students, and for determining each student's ability and fitness for participation in sports and other campus activities. Members of the athletic teams will continue to be given special examinations, as has been the practice in the past.

A form has been designed, to be sent to the prospective applicant with his other papers and on which the student, with help if necessary for accuracy and completeness, will answer questions designed to elicit his medical history. A second part of the form is for the recording, by the physician, of the results of the physical examination, including his estimate of the student's abilities and special needs. In order to preserve the confidential nature of this material, the physician is asked to seal the completed report in the envelope, addressed to the Health Service, which is provided with it.

In making this change, the University of Kentucky Health Service expects the following advantages among others to result.

1. The student's health evaluation will be performed by the physician who knows him best.

2. The importance of periodic health examinations and of the maintenance of medical contacts in the home community will be stressed.

3. Early treatment of remediable conditions and maintenance of immunizations will be encouraged.

4. The Health Service will be more able to concentrate its facilities on those students who have special problems.

5. Cooperation between family physician and University Health Service in the care of any student, when this is necessary or desirable, as well as the continuation of health programs or courses of treatment already instituted, will be greatly facilitated.

EDITORIALS

Your Stake in Kentucky's Blue Shield Plan

CAN you visualize what would happen if organizations unrelated to the medical profession were to take over the shape and destiny of the voluntary health movement?

There is a strong possibility that such a condition would mean subordination of or disregard for the interests and thoughts of physicians regarding health insurance. For this reason, you and every physician in the state have a vital stake in the success of your own medical prepayment plan—Kentucky Physicians Mutual.

Support of this plant demonstrates your determination to solve the basic problem of medical economics on terms that will assure you of the right to give your patients the best care which you are capable of rendering.

Since Blue Shield exerts a dominant influence on the destiny of the voluntary health movement, the importance of a directing and controlling influence over Blue Shield by the medical societies is of utmost importance. In fact, Blue Shield is the medical profession's principal means of controlling the economy of medical practice.

Although Blue Shield operates in accordance with insurance principles, fundamentally, it is in no way comparable to an insurance company. It must consider the reactions, ideas, and goals of the medical profession, as well as the actuarial factors, whereas, an insurance company's primary concern must necessarily be a consideration of dollars and cents.

The first basic requisite of any non-profit prepayment plan that wants to use the name Blue Shield is that it must have the formal and continuous approval of the state and county medical societies in its area of operation. Another important basic requirement is that its medical policies and schedules of payment be determined by physicians.

The importance of Kentucky Physicians Mutual to you, the physician, is highlighted by the fact that each year it accounts for an ever larger part of your income and the incomes of other Kentucky physicians. During 1957 the Kentucky Physicians Mutual made payments to physicians practicing in the state which totalled more than $4,100,000.

These figures illustrate a fact which can not be ignored—the fact that Blue Shield now exerts a tremendous influence on the lives and practices of physicians, and, in turn, deserves and requires the thoughtful guidance of those physicians.

The relationship of Kentucky's Blue Shield Plan to you—the practicing physician—is a reciprocal one. Without your guidance, Blue Shield might grow into something other than what the profession desires it to be, and, without your support and active participation there would not even be a Blue Shield!

Branham B. Baughman, M.D.

A New Hospital—Or Two

THE building fund drive for the Methodist Evangelical Hospital in Louisville is now nearing the stage of completion. With the formal campaign ended, there remains yet the receipt of many scattering subscriptions which for one reason or another have been delayed.

No effort in recent years has been more encouraging than has been this concerted effort on the part of our churches, businesses and interested citizens of other denominations. Perhaps the response has been unusually good because of the urgent need for increased hospital space. Also, however, the achievement is a testimonial to the effectiveness of those engaged to direct the campaign, Mr. Milo Henke and Mr. Gerald Larson.

The stated goal of $2,000,000 has been well

Opinions expressed in contributions to The Journal are those of the writers and do not necessarily reflect the views of the Kentucky State Medical Association.

exceeded. The original intent to build a five story hospital with capacity of 218 beds has been enlarged now to a plan for a six story structure with a capacity of 300 beds. A larger vision is certainly appropriate in this time of need for increased hospital space.

In no recent undertaking have our physicians acquitted themselves with more credit. Assigned the responsibility for raising $150,000 as their part of the total, the task was undertaken with determination although with some misgiving. Enthusiasm seemed contagious and by the end of the campaign 413 physicians had subscribed beyond $160,000 approaching 110 per cent of their assignment. This activity has proved to be a stimulating and a uniting influence upon our local profession. Never before has a financial undertaking of such proportion been so well accomplished by Louisville physicians. Certainly if it has been done once, it can be done again for other worth-while objectives.

It has been observed, and perhaps with some basis of fact, that the spirit of civic pride and progressiveness among physicians is lacking in Louisville in comparison with other cities of our size. It is certain that, in the immediate past, physicians' groups in other cities of our size have failed to attain a reasonable assigned financial goal for similar projects and, the proportion of the members participating in the enterprise has been smaller than was shown in our recent campaign. These facts need to be called to our attention and should tend to disprove the charge that we are not as progressive or civic minded as our colleagues in adjoining cities.

Louisville is a fast growing community and by the time the Methodist Evangelical Hospital is completed in 18 months or 2 years, even with its greatest capacity of 300 beds, a need for additional beds will then be as acute and pressing as it is today. We need to be thinking ahead. We should begin now to plan for an additional hospital in the medical center. A University Hospital, as a part of the medical center and the University of Louisville School of Medicine, is sorely needed. It should be planned upon the same basis as the new hospital in the University of Kentucy Medical Center, to become an integral part of our teaching program. A 300 bed hospital for indigent or private patients from our section of the state can be used effectively and profitably in our new and enlarged medical school. We must participate in the indigent medical care program of our section of the state as well as in Louisville alone.

Now is the time to look ahead and prepare to take our place in the program.

Sam A. Overstreet, M.D.

Support

Immunization Week

May 4-10

ORGANIZATION SECTION

Complete Immunization of Public is Goal, May 4-10

"The goal of Immunization Week—May 4-10—is elimination of needless deaths from controllable diseases by complete education and immunization of the public," according to Delmas M. Clardy, M.D., Hopkinsville, chairman of the KSMA Committee on Public Health.

Doctor Clardy emphasized the importance of cooperation of all members in helping to make this fifth annual drive sponsored by the KSMA a success. Several organizations including the Home Demonstration Agents, the Kentucky Council of Churches, the Kentucky Women's Club, and the Woman's Auxiliary of the KSMA have also been asked to cooperate, he said.

Through the mediums of the press and radio, the importance of protection against polio, typhoid, tetanus, diphtheria, small pox, and whooping cough will be stressed.

During the week, every physician is urged to learn the immunization needs of his patients and to display the immunization week information in his office.

Other members of the Public Health Committee are: J. M. Dishman, M.D., Greensburg; C. Howe Eller, M.D., Louisville; Sylvan A. Golder, M.D., Covington; Shelby Hicks, M.D., New Castle; Jesse C. Woodall, M.D., Trenton.

Drs. Mersch and Pedigo at 2nd District Meet

The annual dinner meeting of the Second Councilor District will be held at Gabes Restaurant in Owensboro on Wednesday, May 7, according to Walter L. O'Nan, M.D., Henderson, district councilor.

KSMA President Edward B. Mersch, M.D., Covington, and George Pedigo, Jr., M.D., Louisville, are scheduled to speak. Doctor Pedigo will be featured on the scientific portion of the program.

The Daviess County Medical Society will be the host group. J. Edmund Bickel, M.D., is the Daviess County President. Local arrangements are being completed by A. B. Colley, M.D., Owensboro.

Ky. M.D.'s on Surgical Program

Three Kentucky physicians were featured on the program of the 26th annual meeting of the Southeastern Surgical Congress in Baltimore on March 10-13.

Participants included: Harold E. Kleinert, M.D., Louisville, Coleman C. Johnston, M.D., and D. M. Royalty, M.D., Lexington.

Dr. Van Meter Chosen Top Citizen in Lexington for 1957

J. Farra Van Meter, M.D., who is KSMA Councilor for the 10th District and was chairman of the Council in 1953-4, was awarded the Lexington Optimist Club Cup as Lexington's outstanding citizen of 1957 at ceremonies on March 7.



Doctor Van Meter, a past president of the Fayette County Medical Society, was selected to be the 31st recipient of the cup on the basis of his civic service, church and religious activities, professional standing, and personal life.

He is on the Board of the Kentucky Medical Foundation and is active in Lexington's United Community Services, the YMCA, Kiwanis, and religious organizations. In 1957, he was given a special award for his work in the Kentucky division, American Cancer Society.

Districts 1 and 3 Meet Jointly at Kenlake, May 8

KSMA President Edward B. Mersch, M.D., and four members of the University of Louisville School of Medicine faculty will be featured at the joint dinner meeting of the 1st and 3rd Councilor Districts at the Kenlake Hotel on May 8, according to J. Vernon Pace, M.D., Paducah, and Ralph D. Lynn, M.D., Elkton, Councilors for the 1st and 3rd districts, respectively.

Doctor Mersch's subject had not been announced at press time. Other participating physicians and their subjects are:

Maurice M. Best, M.D., associate professor of medicine, "The Diagnosis of Arteriosclerosis"

Charles H. Duncan, M.D., associate professor of medicine, "Treatment of Arteriosclerosis"

Rex O. McMorris, M.D., associate professor and chairman of the department of physical medicine and rehabilitation, "Physical Medicine Aspects of the Treatment of Arthritis"

Harold E. Kleinert, M.D., assistant professor of surgery, "Surgical Emergencies of the Hand"

This is another of KSMA's continuing programs of postgraduate medical education.

AMA Plans to Publish Newspaper for All Members

The AMA's Board of Trustees recently authorized publication of a new 16-page newspaper called "The

AMA News" which according to current plans will be distributed every two weeks.

Approximately 200,000 physicians will receive the paper which will bring the projects and activities of the association, as well as all non-scientific news of interest to the profession.

First issue of the "News" is expected to be ready for distribution at the AMA Annual Convention in San Francisco, June 23-7.

Ky. College of Surgeons Meets May 16-17 in Louisville

Fourteen guest speakers will highlight the program of the Kentucky Chapter, American College of Surgeons meeting at the Brown Hotel in Louisville on May 16-17, according to Coleman C. Johnston, M.D., program chairman.

The complete two-day program follows:

Friday, May 16

9:30 a.m. "Incipient Cancer," William Christophersen, M.D.

10:00 a.m. "Omphalocele," Hugh Lynn, M.D.

10:30 a.m. "Simple Suture of Perforated Peptic Ulcer," Philip J. Harbrecht, M.D.

11:00 a.m. "The Surgical Rehabilitation of the Ulcerative Colitis Patient," Joseph Hamilton, M.D., and Marvin Lucas, M.D.

2:00 p.m. "Developments in Blue Shield," Mr. D. Lane Tynes

2:30 p.m. "Mass Casualties," Joseph R. Shaeffer, M.D.

3:00 p.m. "Homocraft Patch Repair of Bullet Wounds of the Aorta," Harold Kleinert, M.D.

3:30 pm. "Surgery of the Aorta," Henry T. Bahnson, M.D.

4:00 p.m. "Fracture Dislocation of the Ankle," Oscar Hampton, M.D.

Saturday, May 17

9:30 a.m. "Discussion of the Medicare Program," Earl C. Lowry, M.D.

10:00 a.m. "Considerations in Open Heart Surgery," Henry T. Bahnson, M.D.

10:30 a.m. "Experiences with the Billroth I Operation Combined with Hemigastrectomy and Vagotomy in the Treatment of Duodenal Ulcer," Robert M. Zollinger, M.D.

11:00 a.m. "Experiences with 1200 Patients with Verified Herniation of the Nucleus Pulposus in the Lumbar Spinal Column, Loyal Davis, M.D.

Mental Hospital Patient Program Adds 34 Western Counties

Western State Hospital recently extended its experimental-treatment program for discharged mental-hospital patients to 34 counties in western Kentucky.

One of the first such projects in the nation, it is coordinated jointly by the Kentucky Departments of Health and Mental Health. Under the program, public health nurses in each of the counties will handle follow-up care of mental patients after they leave the hospital.

Orientation programs for the nurses lasting one week have already gotten underway at Western State and will be continued for 3 months, according to Robert G. Blackwelder, M.D., western state superintendent. During the week-long program nurses observe treatment procedures and attend psychiatric lectures. Public health officials from eight counties attended the initial sessions the week of March 17.

Theodore Schramm, M.D., director of community services for the Department of Mental Health, said, "This project will be a forward step in continuing the hospital's efforts to provide follow-up services to discharged patients and their families."

Four Districts Plan Meetings in May and June

Plans are being formulated for three Councilor District meetings to be held late in May and early June, according to announcements made by the District Councilors involved.

KSMA President Edward B. Mersch, M.D., Covington, will speak at every meeting.

Full information on these programs will be carried in future issues of the Journal of the KSMA.

7th Dist. Meet, Frankfort, May 22

The 7th Councilor District will have its annual dinner meeting at the Frankfort Country Club on Thursday, May 22, according to Branham B. Baughman, Frankfort, District Councilor.

14th District, Hazard, June 18

Charles C. Rutledge, M.D., Hazard, Councilor for the 14th District, is planning the annual dinner meeting of his district in Hazard on June 18.

12th and 15th Cumberland Falls, June 19

In a joint statement, Garnett Sweeney, M.D., Liberty, Councilor for the 12th District, and Keith P. Smith, M.D., Corbin, Councilor for the 15th District announced that the annual joint dinner meeting of their district would be held at Cumberland Falls on June 19. This joint meeting has had an attendance of up to 100 in the past several years.

GP's in State to Meet Apr. 23-25 in Louisville

Twenty-one subjects of interest to general practitioners of the state will be featured on the program of the Seventh Annual Scientific Assembly of the Kentucky Academy of General Practice at the Brown Hotel in Louisville on April 23, 24, and 25.

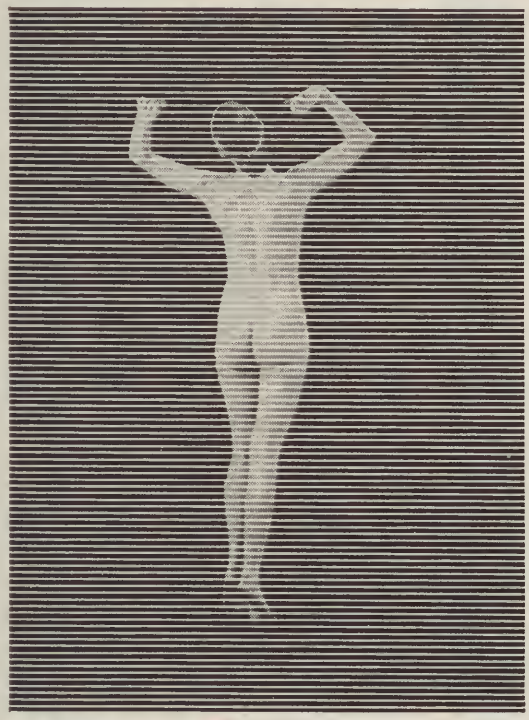
Names of scientific speakers and their subjects were carried in the March issue of the Journal. Final plans for the assembly, which will also include technical and scientific exhibits, are currently being completed, according to Edgar B. Morgan, M.D., chairman of the KAGP program committee.

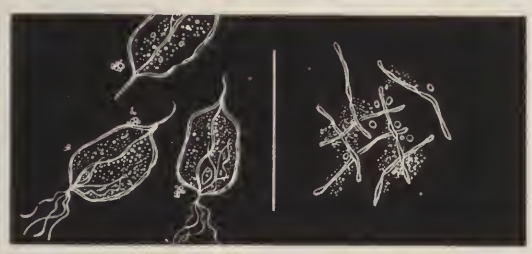
The editor of the Journal of the AMA Austin Smith, M.D., will discuss "The Future of the General Practitioner" at the annual KAGP banquet on Thursday evening, April 24. Registration for members, wives, guests, and exhibitors will be conducted each day.

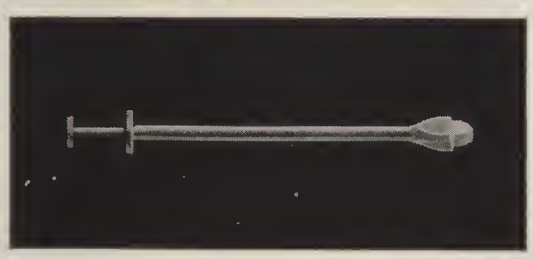
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The following therapeutic procedure is suggested: One or two tablets are inserted by the patient each night and each morning; treatment is continued for four to eight weeks.

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A Floraquin applicator is supplied with each box of 50 tablets. G. D. Searle & Co., Chicago 80, Illinois. Research in the Service of Medicine.

SEARLE

Senator Morton Asks for Stamp in Memory of Dr. McDowell

The Post Office Department has been asked to issue a commemorative stamp in 1959 to memorialize the 150th anniversary of medicine's first known ovariotomy by pioneer Kentucky Surgeon, Ephraim McDowell, M.D., according to an announcement from U. S. Senator Thruston B. Morton.



Senator Morton

"I think it would be most appropriate for Dr. McDowell's distinguished contribution to surgical science to be commemorated in this manner," Senator Morton said.

He has requested Postmaster General Arthur Summerfield to issue the stamp next year in connection with the observance of this "memorial surgical milestone" which took place December 25, 1809 in Doctor McDowell's home in Danville.

Doctor McDowell performed the successful ovarian operation on the 45-year-old mother of five children who rode 60 miles on horseback to reach his residence. She survived the operation and lived for 33 years after it.

KSMA President Edward B. Mersch, M.D., Covington, expressed the Association's deep appreciation to Senator Morton for his efforts to achieve the McDowell memorial stamp issue desired by the Association.

4th and 6th Districts Plan Meet at Mammoth Cave Hotel

The 4th and 6th Councilor Districts will hold a joint meeting at the Mammoth Cave Hotel on Thursday, June 12, according to an announcement from District Councilors W. Keith Crume, M.D., Bardstown, and John P. Glenn, Russellville.

Although the program was incomplete at press time, plans call for an address by KSMA President Edward B. Mersch, M.D., and for scientific presentations.

Full program of the meeting, which is scheduled to start with an afternoon session at 3:30 and will include a dinner at 6 p.m., will be carried in the May Journal.

AMA California Meeting Plans Near Completion

The AMA Council on Scientific Assembly is completing plans for an outstanding scientific lecture program for the Association's 107th Annual Meeting in San Francisco on June 23-27, which about 15,000 physicians are expected to attend.

Center for the lectures, films, color TV, and the scientific and technical exhibits will be the Civic Auditorium, the new Plaza Exhibit Hall and other surrounding buildings. Headquarters for the House of Delegates meeting session will be in the Sheraton-Palace Hotel.

W. Vinson Pierce, M.D., Covington, and Robert C. Long, M.D., Louisville, will represent the KSMA in the AMA House of Delegates.

A symposium on the severely injured patient will open the general scientific session on Monday, June 23. Tuesday morning's general meeting will feature another symposium on the hazards associated with therapeutic agents. Special panel discussions and demonstrations are being planned and there will be live operations and demonstrations from San Francisco Hospital on color television.

KSMA members are urged to attend this worthwhile meeting by President Edward B. Mersch, M.D., Covington, who stressed its value to physicians as a means of getting the latest information on new medical techniques and discoveries.

Advance registration will be accepted Sunday, June 22 from noon to 4 p.m. Official registration will open at the new Plaza Exhibit Hall Monday, June 23 at 8:30 a.m. and closes Friday noon.

Panel Discussion to Highlight Combined Meet in Paducah

A panel discussion on "The Place of Chemotherapy in the Treatment of Cancer Patients" will be a highlight of the combined meeting of the 1st Councilor District, the McCracken County Medical Society, and the Southwestern Medical Association at the Irvin Cobb Hotel in Paducah on May 28.

Announcement of the meeting was made by J. Vernon Pace, M.D., Paducah, Councilor for the 1st District. The panel will be moderated by Harwell Wilson, M.D., chief of the department of surgery at the University of Tennessee School of Medicine.

Presiding officer at the meeting, which will include the dinner, panel and discussion of the future of the Southwestern Medical Association, will be William B. Haley, M.D.

KPHA Annual Meeting in March Attended by 800

Eight hundred health workers attending the annual meeting of the Kentucky Public Health Association in Louisville, March 4-6 were urged to work for the widespread use of medical and dental x-ray techniques that reduce the amount of radiation without lessening the diagnostic quality, by Donald R. Chadwick, M.D., of the Department of Health, Education and Welfare in Washington.

Other speakers at the tenth annual 3-day session included: Edward B. Mersch, M.D., Covington, KSMA president; Russell Teague, M.D., Kentucky Commissioner of Health; and William R. Willard, M.D., Lexington, vice president of the U of K Medical Center.

Doctor Teague in his talk envisioned a medical-care program for Kentucky's indigent which would eventually cost $7 million a year. Doctor Willard termed

(Continued on Page 383)

in common mixed infections
...tetracycline phosphate alone

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for children:

PANMYCIN KM Syrup

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BROAD-SPECTRUM TETRACYCLINE IN ITS MOST EFFICIENT FORM

Produces more tetracycline in the blood with no more in the dose. No calcium to depress blood levels.[1] Basic broad-spectrum therapy in bronchitis, pharyngitis, otitis media, tonsillitis, and other common respiratory infections.

1. Welch, H.; Wright, W. W.; and Staffa, A. W.: Antibiotic Med. & Clin. Therapy 4:620, 1957.

in potentially serious infections
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THE BREADTH OF PANMYCIN PHOSPHATE PLUS THE ANTIMICROCOCCAL DEPTH OF ALBAMYCIN†

Offers maximum antimicrobial action at the earliest possible moment. The antibiotic preparation of first resort in pneumonia of unknown etiology, carbuncles, multiple furunculosis, cellulitis, and infections resistant to previous therapy.

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for the 7 monilia-susceptible types
...tetracycline phosphate plus nystatin

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PANMYCIN PHOSPHATE PLUS THE ANTIMONILIAL PROTECTION OF NYSTATIN

The logical choice for patients requiring high doses of antibiotics or prolonged antibiotic therapy; for patients with previous monilial complications; for diabetics; patients on corticoids; the pregnant, debilitated, or elderly; and for infants, especially the premature.

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1. PANMYCIN PHOSPHATE IN COMMON MIXED INFECTIONS

USUAL DOSAGE: ADULTS: 250 mg. every 6 hours or 500 mg. every 12 hours. CHILDREN: Approximately 8 mg. per pound of body weight daily, in four equally divided doses every 6 hours, or two equally divided doses every 12 hours.

SUPPLIED: CAPSULES: 250 mg. in bottles of 16 and 100; 125 mg. in bottles of 25 and 100.

PANMYCIN KM SYRUP: Each teaspoonful (5 cc.) contains tetracycline equivalent to 125 mg. tetracycline hydrochloride, and potassium metaphosphate, 100 mg., mint flavor, in 2 fluidounce and pint bottles.

2. PANALBA IN POTENTIALLY SERIOUS INFECTIONS

USUAL DOSAGE: ADULTS: 1 or 2 capsules three or four times a day, depending on the type and severity of the infection. CHILDREN: Proportionately less.

SUPPLIED: Each powder-blue-and-brown capsule contains Panmycin (tetracycline) Phosphate complex equivalent to 250 mg. tetracycline hydrochloride, and Albamycin (as novobiocin sodium) 125 mg.; in bottles of 16 and 100.

Also available: **PANALBA KM GRANULES** (Pediatric). When reconstituted, each 5 cc. teaspoonful contains Panmycin equivalent to tetracycline hydrochloride, 125 mg. and Albamycin (as novobiocin calcium) 62.5 mg., and potassium metaphosphate 100 mg.; in pleasantly flavored vehicle. Dosage is based upon amount of tetracycline—6 to 8 mg. per pound of body weight per day in 2 to 4 equally divided doses.

3. COMYCIN FOR THE 7 MONILIA-SUSCEPTIBLE TYPES

USUAL DOSAGE: ADULTS: 1 or 2 capsules every 6 hours. CHILDREN: Proportionately less.

SUPPLIED: Each brown-and-pink capsule contains tetracycline phosphate complex, equivalent to 250 mg. tetracycline hydrochloride; nystatin 250,000 units. In bottles of 16 and 100.

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...IT DOESN'T STOP THE PATIENT

BONADOXIN brings relief to 88.1% of patients... often within a few hours.[1,2] But it does not produce drowsiness, or side effects associated with over-potent antinauseants. With safe BONADOXIN, "toxicity and intolerance... [is] zero."[2]

Is she blue at breakfast? Prescribe BONADOXIN. Usually just one tablet at bedtime stops nausea and vomiting of pregnancy...

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References: 1. Groskloss, H. H., et al: Clin. Med. 2:885 (Sept.) 1955. 2. Goldsmith, J. W.: Minnesota Med. 40:99 (Feb.) 1957.

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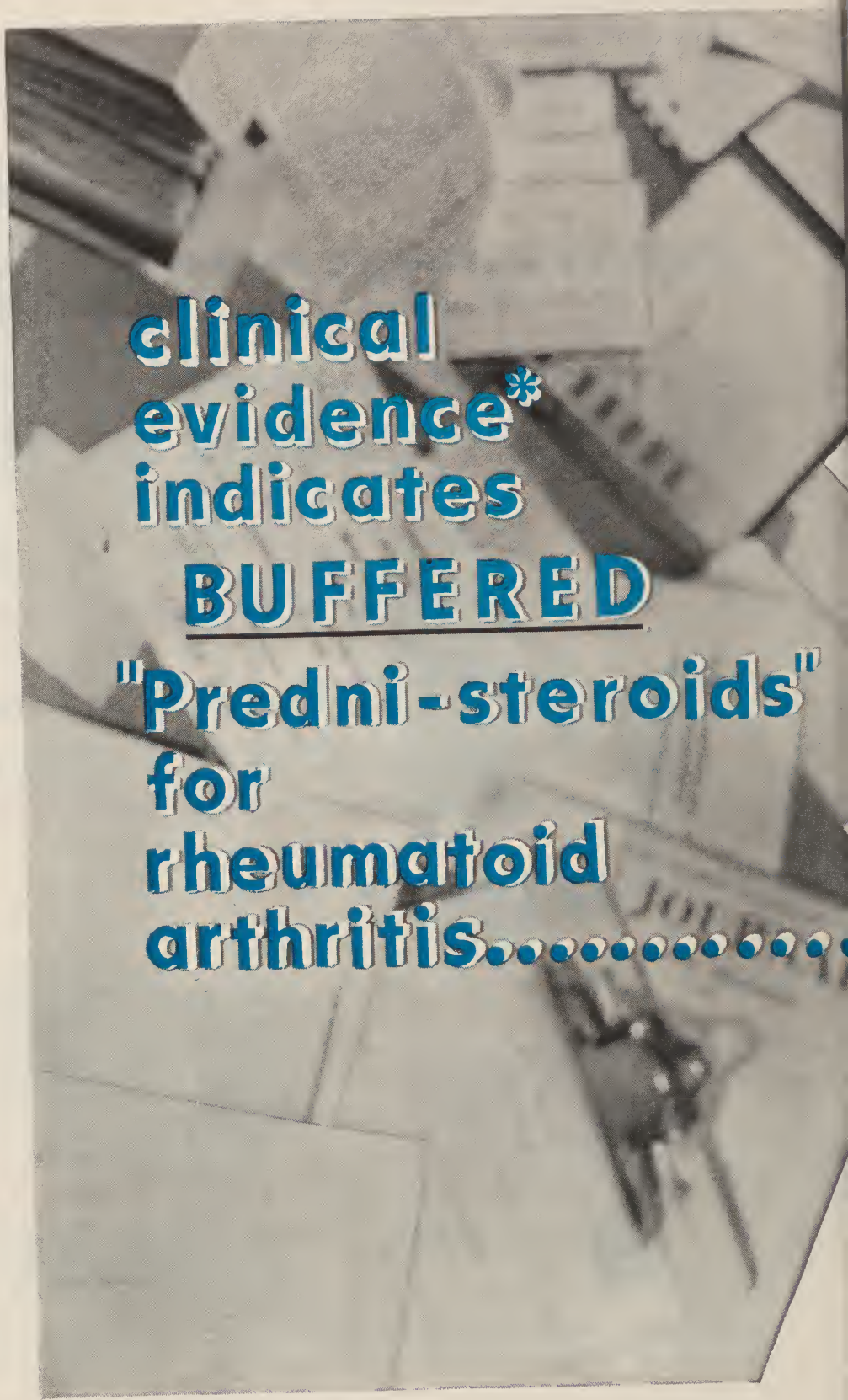
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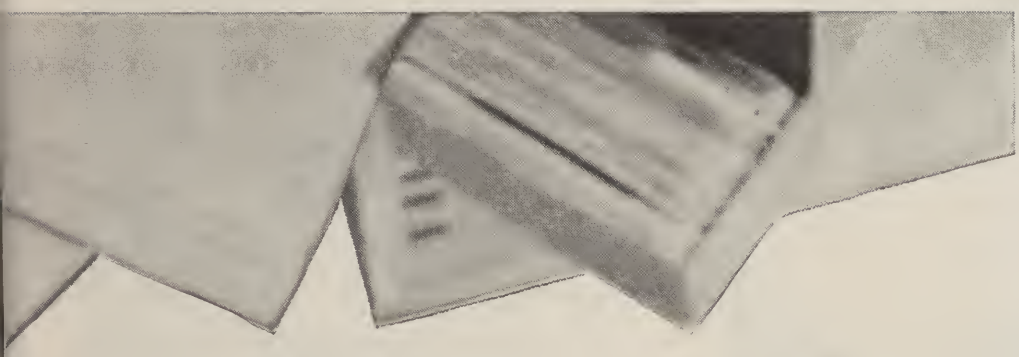
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n view of the beneficial re-
ses observed when antacids
bland diets were used concom-
y with prednisone and predni-
e, we feel that these measures
d be employed prophylacti-
to offset any gastrointestinal
effects."—Dordick, J. R. *et al.*:
State J. Med. 57:2049 (June
957.

*"It is our growing conviction that all patients receiving oral steroids should take each dose after food or with adequate buffering with aluminum or magnesium hydroxide preparations."—Sigler, J. W. and Ensign, D. C.: J. Kentucky State M. A. 54:771 (Sept.) 1956.

*"The apparent high incidence of this serious [gastric] side effect in patients receiving prednisone or prednisolone suggests the advisability of routine co-administration of an aluminum hydroxide gel."—Bollet, A. J. and Bunim, J. J.: J. A. M. A. 158:459 (June 11) 1955.

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(Continued from Page 378)

such a program in Kentucky as "inevitable."

New president of KPHA is J. Homer Holland, administrator of the Paducah-McCracken County Health Department. M. A. Shepherd, M.D., Henderson, is president-elect. Vice president of the group is Randolph Sills, Maysville.

At the close of the meeting, the Mason County Medical Society received the annual award for its contribution to public health in 1957 (see story on page 384) and Mrs. Green Rose Jackson received an award for making the leading individual contribution to the progress of public health.

16 Kentucky Hospitals Approved by Joint Commission

The Joint Commission on Accreditation of Hospitals recently announced that 16 Kentucky hospitals had been added to the list of those accredited by the commission.

Hospitals newly accredited are: Southeastern Kentucky Baptist Hospital, Corbin; Muhlenberg Community Hospital, Greenville; Harlan Memorial Hospital, Harlan; Hazard Memorial Hospital and Mount Mary Hospital, Hazard; Sharon Heights Hospital, Jenkins; Our Lady of the Way Hospital, Martin; McDowell Memorial Hospital, McDowell; Middlesboro Memorial Hospital, Middlesboro.

Pikeville Memorial Hospital, Pikeville; Logan County Hospital, Russellville; Whitesburg Memorial Hospital, Whitesburg; Clark County Hospital Association, Winchester; Riverside Hospital, Paducah; Red Cross Hospital and Our Lady of Peace, Louisville.

Although Our Lady of Peace, Louisville, has been accredited by the American Psychiatric Association since 1956 it is listed for the first time since the Commission taking over the Association's work on accreditation.

U. S. Grants $90,000 to U of L for Kidney Research

The U. S. Public Health Service has granted a total of $90,000 for a three years' research project on kidneys at the University of Louisville Medical School.

Peter K. Knoefel, M.D., chairman of the department of pharmacology, who will head the project, says the U. S. grant will enable him to continue basic research in this subject started several years ago.

An Eastman Kodak grant of about $12,000 a year for this and related projects has financed the work in the past and will continue. Grants from the various Heart Associations have also contributed.

Seven Added to KSMA Roster

Seven new members have been added to the KSMA roster since the last listing in the Journal. They are:

Edward L. Foote, M.D., Louisville
William W. Johnson, M.D., Louisville
E. D. Piatt, M.D., Louisville
Charles Price, M.D., Beaver Dam
Malcolm M. Stanley, M.D., Louisville
Paul K. Wellman, M.D., Bowling Green
E. H. Wicker, M.D., Harlan

STUDENT AMA

The annual SAMA lecture was held on March 10 in the Rankin Amphitheater of the Louisville General Hospital. The lecture was presented by Robert Wissler, Ph.D., M.D., who is professor and chairman of the department of pathology at the University of Chicago.

Doctor Wissler spoke on, "The Contributions of Resistant Species to the Experimental Study of Atherosclerosis." The talk was both interesting and stimulating to students and faculty alike. The subject of atherosclerosis is a timely one, indeed, and holds a great deal of interest for members of the medical community.

While Doctor Wissler was in Louisville, he was the guest of Dr. and Mrs. H. C. Pirkle, 3101 Furman Boulevard. Doctor Pirkle is a pathologist who took his training at the University of Chicago and who is now a member of the faculty at the University of Louisville. Immediately following the lecture, a luncheon was given in honor of the visiting speaker by the pathology department at the University of Louisville.

SAMA's chapter president and president-elect were invited to attend. These officers certainly enjoyed the luncheon and SAMA would like to express its appreciation to Doctor Pirkle and to the University of Louisville Department of Pathology for their hospitality to Doctor Wissler, and for their great asssistance in the matter of this lectureship.

A Change in Status

An important change has been made in the status of the local chapter of the Student AMA. Local constitutional changes have been made which support the amalgamation of this chapter with the U of L medical school student council. It is felt by all concerned that this amalgamation offers a number of advantages to both organizations without distracting from the purpose of either.

The combination permits every medical student in good standing to be a member of the local chapter of SAMA. It gives SAMA a place in the student government and a great increase in legislative powers. It gives the name and prestige of a large national organization to the medical student council; it gives the student council representatives in the annual national meetings of the Student AMA. Lastly, it constitutes a worthwhile unity of organized student activity.

A precedent has been set for this type of amalgamation at the law school. There the law school student council is identical with the Student Bar Association. A new constitution has been set up by Neville Caudill, the president-elect of the local SAMA chapter. This constitution provides the above amalgamation. It was unanimously accepted by both groups in February and will take effect on May 1, 1958.

Attend Officers Conference

Local student AMA officers have attended the annual KSMA County Society Officers Conference which was held this year at the Phoenix Hotel in Lexington on March 27. The topics which were dis-

cussed were of considerable interest to the Student AMA contingent. They constituted some of the most hotly debated issues in medicine today. The meeting was another opportunity for SAMA to participate in the activities of organized medicine in this state. As students we are extremely appreciative of this opportunity. Again our thanks go to the KSMA and to its executive secretary for the close personal interest we have been given.

National Convention

The forthcoming national student AMA Convention is advertised as being, "The biggest ever." It is certain that the Louisville delegation will be expanded this year by the presence of the entire senior class. The senior class will be in Chicago at Convention time as the guest of Abbott Laboratories. The local chapter delegate will be Neville Caudill. He intends to take an alternate delegate along, as well as an indefinite number of interested freshman, sophomore, and junior convention attendants.

Clarke Anderson, President
U of L Chapter, Student AMA

Hawaii Medical Conference, July 1 to Follow AMA Meeting

All members of the medical profession are invited to attend the Hawaii Summer Conference in Honolulu on July 1-3 which is under the auspices of the Hawaii Medical Association headed by Samuel L. Yee, M.D.

The conference, which will include scientific sessions, official social functions and trips, has been timed to immediately follow the AMA Annual Meeting in San Francisco on June 23-27. The program will feature many outstanding speakers, including, Frederick C. Robbins, M.D., of Cleveland, and Ernest Jawetz, M.D., of San Francisco.

Those planning to attend will have a choice between traveling round-trip by air and steamer travel between the mainland and Honolulu. Official travel arrangements are under the direction of the Lee Kirkland Travel, c/o Medical Tours, P.O. Box 3433, Chicago 54, Illinois.

Jefferson County Votes Approval for Medical Foundation

At its February 17 meeting the Jefferson County Medical Society approved a resolution from its building committee, headed by Sam A. Overstreet, M.D., for the proposed erection of a medical scientific and educational foundation.

Through the foundation, the Society hopes to build a new headquarters office, including a library and film library.

The Society at its March 17 meeting agreed that each member would be assessed an initial fee of $5 for the purpose of getting the minimum cash assets for such a foundation.

Consideration may be given, as indicated by additional resolutions, to seeking space in the proposed new medical center around General Hospital, providing the city has sufficient funds available from its urban redevelopment program.

U of L School of Medicine Gets Grant of $39,635

The University of Louisville School of Medicine recently received $39,635 from the National Fund for Medical Education which will be used primarily for faculty salaries and scholarships, according to Dean J. Murray Kinsman, M.D.

Eighty-two medical schools received grants from the fund which were made possible by the contributions of 2,662 corporations and individuals, plus matching contributions from the Ford Foundation. The unrestricted grants bring to more than $15 million the amount awarded by the Fund since 1951.

Last year the U of L Medical School received $39,570 from the Fund. Elmore A. Vossmeyer, chairman of the Louisville committee of the Fund commented, "By helping the schools overcome their 'academic deficits', industry is helping to make it possible for medical education to realize more of its great potential."

Blue Cross Elects at Annual Meet

James P. Miller was named chairman and Hart Hagan M.D., vice chairman of the Board of Directors of the Blue Cross Hospital Plan, Inc., at the annual meeting of the trustees at the Pendennis Club in Louisville on February 24. D. Lane Tynes, Louisville, was elected president.

Other officers are: J. Ed McConnell, J. Ray Ingram, Donald W. Giffen, vice presidents; A. E. Norman, treasurer, and Harold Moses, secretary. Mr. Tynes reported that Blue Cross paid more than $10 million to hospitals for care of members during 1957 and that membership as of December 31, 1957 was 634,021.

Dr. Hiatt Takes Post at VA Hosp.

Russell Hiatt, M.D., has taken over his duties as manager of the Veterans Hospital in Louisville. He succeeds H. C. Hardegree, M.D., who retired on December 31 after 10 years as manager.

Doctor Hiatt comes to Louisville from the VA Hospital in Fort Wayne, Indiana. A native of Indiana, he studied at Indiana University School of Medicine. He practiced medicine in Richmond for 21 years until 1942 when he entered the army. After leaving the army in 1946, he was stationed at several VA Hospitals.

Mason County Society Honored

The Mason County Health Association was honored by the Kentucky Public Health Association for its "outstanding contribution" to public health during 1957 on March 6.

Headed by William H. Sewell, M.D., Maysville, the society was cited for a comprehensive polio immunization program, its campaign for a health tax, and offering free prenatal and postnatal care to all. Doctor Sewell accepted the plaque for the Society at the Public Health Association's annual session.

Application

FOR SPACE IN THE SCIENTIFIC EXHIBIT

1958 Annual Meeting — Kentucky State Medical Association

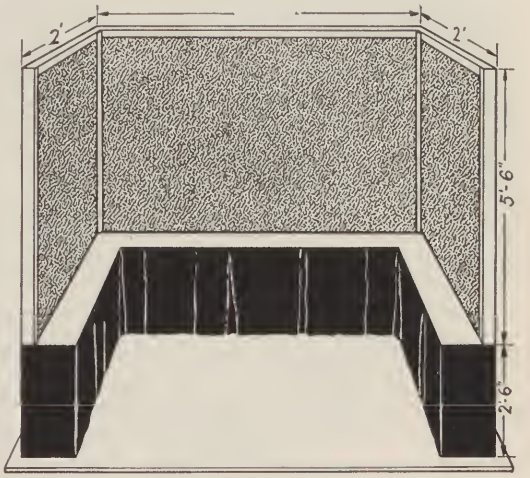
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EVERETT L. PIRKEY, M.D., Chairman
Committee on Scientific Exhibits
Louisville General Hospital,
Louisville 2, Kentucky

Applications for space should be received before July 1, 1958

Dimensions and structure of K.S.M.A. Scientific booth are shown in accompanying illustration



1. Title of Exhibit: .....

2. Description or nature of exhibit: (Attach brief description to this blank).

3. Will you require shelf space? .....

4. Give approximate amount of wall space needed. (Included in total space is two side walls of two feet in length) .....

5. Name of institution co-operating in the exhibit (if desired) .....

6. Name of exhibitor: .....

..... (Street & No.) ..... (City)

The Kentucky State Medical Association will provide without cost to the exhibitor the following: Exhibit space, shelves, sign for booth, current, bracket lights, provided all items are approved in advance by the committee.

Cost of transporting exhibits to the meeting must be borne by the individual exhibitor as well as costs of cards, signs, etc., which are a part of the exhibit.

View boxes, furniture, decorations, etc., may be rented, if desired, by applying directly to Jos. T. Griffin Company, 704 West Main Street, Louisville 2, who supply equipment for the annual K.S.M.A. meeting.

In Memoriam

CHARLES L. GRAHAM, M.D.
Tollesboro
1874-1958

Charles L. Graham, M.D., who retired in 1945 after 38 years of practice in Lewis and Mason counties, died at his home in Tollesboro on March 8, after an illness of several years.

Doctor Graham graduated from the Louisville College of Medicine in 1906. He had practiced in Charters, Petersville, Trinity, and Springdale before settling in Tollesboro. During World War I, he served as a captain in the medical corps.

ZACHARIAH M. SCIFRES, M.D.
Louisville
1881-1958

Zachariah M. Scifres, M.D., who practiced in Louisville for more than 40 years, died at Norton Memorial Infirmary in Louisville on March 8.

After working as a civil engineer in Oklahoma, Doctor Scifres, a native of Indiana, studied at Indiana University Medical School, Indianapolis. He received his M.D. degree in 1915 and had been in active practice until about a year ago.

CHARLES J. ARMSTRONG, M.D.
Louisville
1889-1958

Charles Joseph Armstrong, M.D., professor emeritus of plastic and reconstructive surgery at the University of Louisville Medical School, died on March 9 at his home in Louisville after an illness of several months.

A 1922 graduate of Harvard Medical School, Doctor Armstrong was head of the plastic and reconstructive surgery department at U of L until his retirement two years ago. He was a founder of Plastic Surgery International and the Innominates, a local medical group. He was also a diplomate of the American Board of Plastic Surgery.

J. J. EZELL, M.D.
Hopkinsville
1875-1958

James J. Ezell, M.D., Hopkinsville, died on March 4 at his home after an illness of eight years. He had been a physician in Christian County for nearly half a century before his retirement 18 years ago.

A native of Tennessee, he received his M.D. degree at Tulane University in New Orleans. He began his practice at Lafayette in 1900 and moved his office to Hopkinsville in 1926. After his retirement, he was named vice president of the First City Bank and Trust Company, Hopkinsville.

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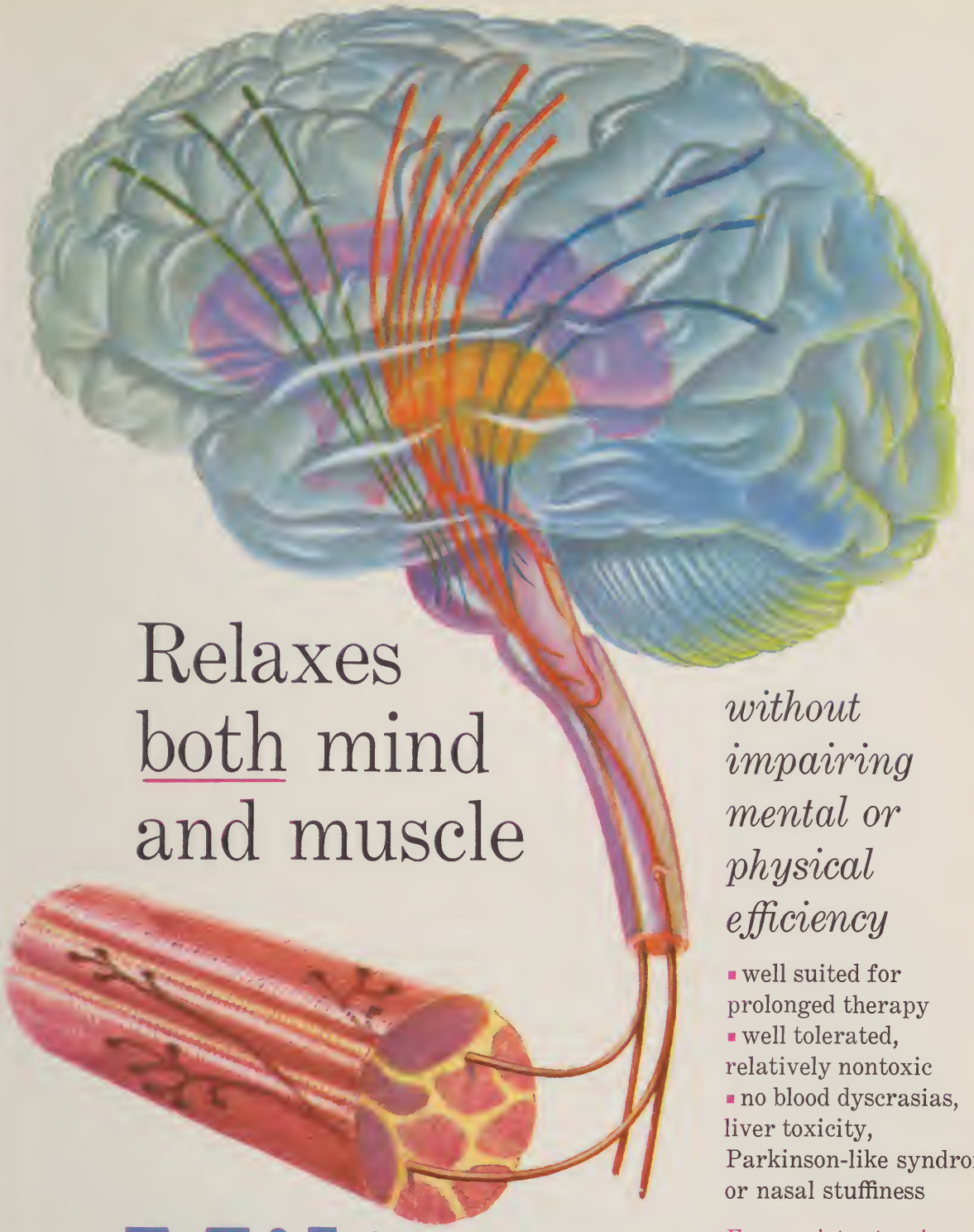
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* 1. Clyman, S. G.: Postgrad. Med. *21*:309, 1957.
2. Bleiberg, J.: J. M. Soc. New Jersey *53*:37, 1956.
3. Abrams, B. P., and Shaw, C.: Clin. Med. *3*:839, 1956.
4. Welsh, A. L., and Ede, M.: Ohio State M. J. *50*:837, 1954.
5. Bleiberg, J.: Am. Practitioner *8*:1404, 1957.

County Society Reports

Mason

William H. Sewell, M.D., was re-elected president of the Mason County Medical Society at a meeting of the Society in Hayswood Hospital, Maysville, on February 28.

New secretary-treasurer is Claude Cummins, M.D., who replaces George Estill, M.D.

McCracken

The January meeting of the McCracken County Medical Society featured William R. Chambers, M.D., neurosurgeon from Atlanta, Georgia who spoke on the various cerebral entities causing headaches. Burton Haley, M.D., presided.

J. V. Pace, M.D., discussed the various aspects of the Forand Bill now pending in the U. S. Congress. A motion was made and carried that each member of the society write a letter to Kentucky's U. S. Congressmen strongly opposing the bill.

The proposed changes being made in the McCracken County Health Department regarding x-ray examinations and the immunization program were announced by Judith A. Stout, M.D. The Health Clinic Committee will meet with Doctor Stout to review these programs.

Winfield Stryker, M.D., announced that more folders and literature on the Polio Immunization Program were available and William B. Haley, M.D., read a letter from Sam Sloan, Jr., regarding a new policy on Business Expense Liability.

Policy on TB Patients Changed

The policy of the Julius Marks Sanatorium in Lexington regarding the hospitalization of tuberculosis patients from counties other than Fayette has been changed, according to an announcement from James T. Gilboy, Jr., M.D., superintendent. The new policy is to accept patients from anywhere in the state at a rate of three dollars ($3) a day.

The American Goiter Association will hold its annual meeting at the St. Francis Hotel in San Francisco, California, on June 17, 18 and 19. Papers presented at the three-day meeting will discuss the physiology and diseases of the thyroid gland. Hotel reservations may be secured by writing to Goiter Housing Bureau, Room 300, 61 Grove Street, San Francisco, California and be accompanied by a deposit of $10 per room.

Multiple exchange programs of medical scientists over a two-year period have been agreed upon by the United States and Russia. This year the Russian Ministry of Health will send a group of three or four medical scientists to the U. S. for a period of two or three weeks to deliver lectures and exchange experiences. A similar group from this country will visit Russia. The agreement also provides for the exchange of medical journals and medical films. A joint communique expressed hope that the program will contribute substantially to the betterment of relations between the two countries.

U of L Trustees Announce Med. Faculty Changes

The U of L Board of Trustees, meeting in closed session on February 27, approved several faculty changes in the School of Medicine.

Appointments included: Robert Glen Boles, M.D., as instructor in otolaryngology; Robert W. Docker, M.D., and Edwin W. Nolan, M.D., as instructors in ophthalmology. Edith Stanley, M.D., Chimer D. Moore, M.D., and John L. Wolford, M.D., as instructors in medicine; George R. Byerly, M.D., as instructor in urology and John Levitas, M.D., as instructor in orthopedic surgery.

Also, promotion of Thomas Booth, M.D., Gordon L. Green, M.D., and Thomas P. Walsh, M.D., to professors of otolaryngology; and Frank Swartz, M.D., to assistant professor of anatomy. Resignations of Donald P. Conwell, as assistant professor of community health and James V. Lowry as lecturer in mental health were announced.

Britain to Boost Health Charges

Contributions to the British National Health Service by those using it and by employers will be boosted again in July, according to an announcement from the chancellor of the exchequer.

The chancellor estimated the cost of health service during the coming year at more than $2 billion. He said that the whole structure of the social services would be imperiled unless their cost to the treasury was kept in bounds.

CASE DISCUSSION

(Continued from Page 371)

multiple injuries will be more readily provided when we are aware of the problems of management and diagnosis faced by all of the members of the surgical team, from the admitting officer to the operating surgeon and the anesthesiologist.

Mountz Succeeds Hardgrove

Arden Hardgrove, for 20 years administrator of Norton Memorial Infirmary, retired on March 16. He was succeeded by Wade Mountz, who has served as assistant administrator since 1951.

Mountz has a master's degree in hospital administration from the University of Minnesota and was a resident at the hospital before becoming assistant administrator. Hardgrove will continue to serve as part time adviser to Mountz and the board of trustees.

Charles T. Moran, M.D., associate professor of ophthalmology at the University of Louisville School of Medicine, was a speaker at the 1958 Sight-Saving Conference in Philadelphia on March 12-14. Doctor Moran discussed vision screening of Louisville preschool children at the meeting which is sponsored by the National Society for the Prevention of Blindness.

TAKE A LOOK AT
NEW DIMETANE
THE UNEXCELLED
ANTIHISTAMINE

(Continued from Page 340)

its convenience and the fact that no needle is necessary. However, it does have serious basic limitations and is not recommended. Many attempts have been made to improve patch test results, but the dose of tuberculin cannot be controlled because of the many factors which affect absorption of tuberculin through the skin.

A practical age schedule for tuberculin testing must always be a compromise. It seems to be common practice to test at least once each year as long as there is no reaction, substituting annual X-ray examination if the test becomes positive. Finding even an occasional new infection should be worth the little effort it takes in view of the risk to the child of future serious complication and the effectiveness of therapy.

If school children are being tested, the grades tested will depend somewhat on the number of new infections expected per year. In a low rate area it may be sufficient to test beginning students in kindergarten or the first grade, children about to leave elementary school and the last year of high school. In a high rate area it may be worthwhile to test all grades every year. Such group tuberculin testing programs must be carefully planned so the essential follow-up of contacts will not be neglected and to provide for a critical evaluation at the end.

Tuberculin testing of children cannot take the place of the established public health program for tuberculosis control. Isolation and treatment of infectious patients, supervision of inactive cases, examination of contacts of active cases, X-ray screening of high rate groups, and programs to improve general public health are basic to any organized attack on the disease. However, routine tuberculin testing by all physicians coupled with well planned group testing of school children and others in a community can provide additional information useful for a more direct attack on the disease with the present effective therapeutic tools."

Congress on Phys. Med. in August

Scientific and Clinical sessions of the American Congress of Physical Medicine and Rehabilitation will be held at the Bellevue Stratford Hotel in Philadelphia, August 25-29. All sessions are open to members of the medical profession in good standing with the AMA. To stimulate interest in physical medicine and rehabilitation the Congress awards $200 for the best essay on any subject dealing with these fields. Manuscripts must be in June 2. For more information write the Congress at 30 N. Michigan Ave., Chicago 2, Ill.

Circulation of the AMA publication TODAY'S HEALTH continued to grow during 1957. It topped the 400,000 mark for 9 of 12 issues. Advertising lineage increased more than 30 per cent over 1956 with dollar volume showing a 40 per cent gain. Fifty-one new advertising accounts were established in 1957.

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NEWS ITEMS

The Woman's Auxiliary to the Harlan County Medical Society turned the proceeds of its annual luncheon and style show on February 22 over to the Heart Association in memory of the late **Clark Bailey, M.D.**

M. David Orrahood, M.D., who graduated from Harvard Medical School in 1947, has started a practice in Owensboro. He took his internship at the Allegheny General Hospital in Pittsburgh and residency training at Barnes Hospital, St. Louis and the VA Hospital in St. Louis. He was an instructor in clinical pathology at St. Louis University from 1951-54, and recently completed a tour of duty in the army.

Nathaniel H. Talley, Jr., M.D., a graduate of Vanderbilt University School of Medicine in 1951, has started practicing medicine in Princeton. He interned at Grady Memorial Hospital, Atlanta, and took postgraduate training at Thayer Memorial, Veterans, and St. Thomas hospitals in Nashville, Tennessee.

Joseph W. Stein, M.D., who will limit his practice to diseases of eye, ear, nose and throat, has opened an office in Bowling Green. A graduate of the University of Tennessee College of Medicine in 1934, he interned at Los Angeles County Hospital and took his residency training at Memphis EENT Hospital and the Episcopal EENT Hospital in Washington, D. C.

George F. Brown, M.D., a graduate of Tulane University School of Medicine in 1952 has opened a practice in Madisonville. He interned at Philadelphia General Hospital and took postgraduate training at St. Vincent's Hospital in Indianapolis and the University of Arkansas School of Medicine.

George R. Mayfield, M.D., recently opened an office in Louisville for the practice of internal medicine. He is a graduate of Emory University School of Medicine in 1950. Doctor Mayfield took his residency training at Macon Hospital in Georgia and Charity Hospital in New Orleans.

George M. Wilson, M.D., is presently taking a residency in psychiatry at General Hospital in Louisville. He is a graduate of the University of Tennessee College of Medicine in 1947 and interned at Charity Hospital, New Orleans.

Applications are now obtainable for the presentation of papers or for exhibit space at the 1958 scientific sessions of the American Heart Association scheduled for October 24-25 in San Francisco. Papers intended for presentation must be based on original investigation in, or related to, the cardiovascular field. Abstracts of such papers, which should not exceed 300 words, are due before June 13 and must be submitted in triplicate. Applications may be obtained from: Dr. F. J. Lewy, Assistant Medical Director, American Heart Association, 44 East 23rd St., New York 10, N. Y.

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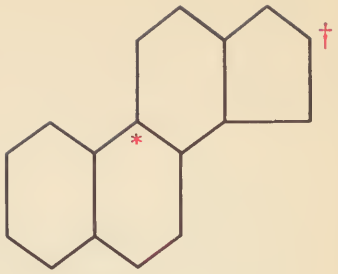
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- **a new high** in anti-inflammatory effects with lower dosage (averages 1/3 less than prednisone)
- **a new low** in the collateral hormonal effects associated with all previous corticosteroids
  - No sodium or water retention
  - No potassium loss
  - No interference with psychic equilibrium
  - Low incidence of peptic ulcer and osteoporosis

Biological Effects of Aristocort

with particular emphasis on:

Kidney function

Animal studies on ARISTOCORT[1] have not demonstrated any interference with creatinine or urea clearance. Autopsy surveys of organs of animals on prolonged study of this medication have shown no renal damage.

Sodium and water

ARISTOCORT produced an increase of 230 per cent of water diuresis and 145 per cent sodium excretion when compared to control animals.[1] Metabolic balance studies in man revealed an average negative sodium balance of 0.8 Gm. per day throughout a 12-day period on a dosage of 30 mg. per day.[2] Additional balance studies showed actual sodium loss when ARISTOCORT was given in doses of 12 mg. daily.[3] Other investigators observed significant losses of sodium and water during balance studies and that those patients with edema from some older corticosteroids lost it when transferred to ARISTOCORT.[4,5] In two studies of various rheumatic disorders (194 cases) on prolonged treatment, sodium and water retention was not observed in a single case.[6,7]

Potassium and chlorides

There was no active excretion of potassium or chloride ions in animals given maintenance doses of ARISTOCORT 25 times that found to be clinically effective.[1] Potassium balance studies in humans[2,3] revealed that negative balance did not occur even with doses somewhat higher than those employed for prolonged therapy in rheumatoid arthritis. Hypokalemia, hyperkalemia or hypochloremia did not occur, when tested, in 194 patients with rheumatoid arthritis treated for up to ten and one-half months.[6,7]

Calcium and phosphorus

Phosphate excretion in animals[1] was not changed from normal even with amounts 25 times greater (by body weight) than those known to be clinically effective. Human metabolic balance studies[3] demonstrated that no change in calcium excretion occurred on dosages usually employed clinically when the compound is administered for its anti-inflammatory effect. Even at a dosage level twice this, slight negative balance appeared only during a short period.

Protein and nitrogen balance

Positive nitrogen balance was maintained during a human metabolic study on maintenance dosage of 12 mg. per day.[3] At dosages two to three times normal levels, positive balance was maintained except for occasional short periods in metabolic studies of several weeks' duration.[2,3]

There was always a tendency for normalization of the A/G ratio and elevation of blood albumin when ARISTOCORT was used in treating the nephrotic syndrome.[8]



Liver glycogen deposition and inflammatory processes

An intimate correlation exists between the ability of a corticosteroid to cause deposition of glycogen in the liver and its capacity to ameliorate inflammatory processes.

In animal liver glycogen studies, relative potencies of ARISTOCORT over cortisone of up to 40 to 1 have been observed. Compared to ARISTOCORT, five to 12 times the amount of prednisone is required to produce varying but equal amounts of glycogen deposition in the liver.[1]

Most patients show normal fasting blood sugars on ARISTOCORT. Diabetic patients on ARISTOCORT may require increased insulin dosage, and occasional latent diabetics may develop the overt disease.

Anti-inflammatory potency of ARISTOCORT was determined by both the asbestos pellet[1] and cottonball[9] tests. It was found to be nine to 10 times more effective than hydrocortisone in this respect.

Gastric acidity and pepsin

The precise mode of ulcerogenesis during treatment with corticosteroids is not known. There is much experimental evidence for believing this may be related to the tendency of these agents to increase gastric pepsin and acidity—and this cannot be abolished by vagotomy, anticholinergic drugs or gastric antral resection.[10] Clinical studies[11] of patients on ARISTOCORT revealed that uropepsin excretion is not elevated. Further, their basal acidity and gastric response to histamine stimulation were within normal limits.

Central nervous system

The tendency of corticosteroids to produce euphoria, nervousness, mental instability, occasional convulsions and psychosis is well known.[12] The mechanism underlying these disturbances is not well understood.

ARISTOCORT, on the contrary, does not produce a false sense of well being, insomnia or tension except in rare instances. In the treatment of 824 patients, for up to one year, not a single case of psychosis has been produced. In general, it appears to maintain psychic equilibrium without producing cerebral stimulation or depression.

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The Promise of Aristocort in Reduction of Side Effects

It is axiomatic to affirm that the undesirable collateral hormone effects of corticosteroids increase in frequency and severity the higher the dosage and the longer used.

It has also become well recognized that the most serious of the major side effects from long-term corticosteroid treatment are peptic ulcers, osteoporosis with fracture, drug psychosis and euphoria, and sodium and water retention leading often to general tissue edema and hypertension.

It is significant that of the close to 400 patients on the lower dosage schedules found effective in bronchial asthma and dermatologic conditions, only 1 case of peptic ulceration has developed. No other of the above side effects have been observed even though ARISTOCORT was administered continuously to them for periods as long as one year.

The treatment of rheumatoid arthritis with steroids appears to result in the highest incidence of side effects. For this reason, the side effects associated with ARISTOCORT therapy in 292 patients with rheumatoid arthritis are reported below.

Peptic Ulcer

The occurrence of peptic ulcer in 292 patients with rheumatoid arthritis treated continuously for up to one year with ARISTOCORT is approximately 1 per cent (2 of the 3 occurred in patients transferred from prednisone). In the remaining 532 cases recently analyzed, only one ulcer has been discovered in a patient who apparently had no ulcer when he was changed from another steroid.

Osteoporosis and Compression Fractures

The occurrence of osteoporosis with compression fracture in 292 patients with rheumatoid arthritis treated continuously for up to one year with ARISTOCORT is 0.33 per cent (1 case[1]). Although these results are encouraging, determination of the true incidence of osteoporosis will have to await the passage of more time.

Euphoria and Psychosis

The euphoria so commonly produced by all previous corticosteroids has seemed a most desirable attribute to patients. In penalty, however, they have often later to pay for this by mental disturbances, varying from mild and transitory to severe depression and psychosis,[2] and toxic syndromes producing even convulsions and death.[3]

Since the onset of these complications is not directly related to duration of steroid administration,[4] the fact that not one case of psychosis occurred in 824 patients treated with ARISTOCORT, is most encouraging.

Sodium Retention—Hypertension–Potassium Depletion

When 17 patients were changed from prednisone to ARISTOCORT, 11 rapidly lost weight although only one had had visible edema.[5] Sodium and water retention, hypokalemia or hyperkalemia and steroid hypertension did not appear in 194 rheumatoid arthritis patients treated with ARISTOCORT.[1,6]

The interrelation between blood and body sodium, and steroid hypertension has long been generally appreciated.[7,8] Except in rare instances, or when unusually high doses are used (e.g., leukemia), the problem of edema and hypertension caused by sodium and water retention, has been eliminated with ARISTOCORT.

Minor Side Effects

Collateral hormonal effects of less serious consequence occurred with approximately the same frequency as with the older corticosteroids.[1] These include erythema, easy bruising, acne, hypertrichosis, hot flashes and vertigo. Several investigators have reported symptoms not previously described as occurring with corticosteroid therapy, e.g., headaches, lightheadedness, tiredness, sleepiness and occasional weakness.

Moon facies and buffalo humping have been seen in some patients on ARISTOCORT. However, ARISTOCORT therapy, in many instances, resulted in diminution of "Cushingoid" signs induced by prior therapy. Where this occurs, it may be related to reduced dosage on which patients can be maintained.

Reduction of dosage by one-third to one-half

In a double-blind study of comparative dosage in patients with rheumatoid arthritis,[9] 70 per cent of the cases were as well controlled on a dose of ARISTOCORT one-half that of prednisone. A general recommendation can be made that ARISTOCORT be used in doses two-thirds that of prednisone or prednisolone in the treatment of rheumatoid arthritis. There are individual variations, however, and each patient should be carefully titrated to produce the desired amount of disease suppression.

Comparative studies, of patients changed from prednisone, indicate reduced dosage of ARISTOCORT in bronchial asthma and allergic rhinitis (33 per cent),[5] and in inflammatory and allergic skin diseases (33-50 per cent).[10,11]

General Precautions and Contraindications

Administration of ARISTOCORT has resulted in lower incidence of major serious side effects, and in fewer of the troublesome minor side effects known to occur with all previously available corticosteroids. However, since it is a highly potent glucocorticoid, with profound metabolic effects, all traditional contraindications to corticosteroid therapy should be observed.

No precautions are necessary in regard to dietary restriction of sodium or supplementation with potassium.

Since ARISTOCORT has less of the traditional side effects, the appearance of sodium and water retention, potassium depletion, or steroid hypertension cannot be used as signs of overdosage. As a rule patients will lose some weight during the first few days of treatment as a result of urinary output, but then the weight levels off.

Patients do not develop the abnormally voracious appetite common to previous corticosteroid administration. In fact, some patients experienced anorexia, and it is advisable to inform patients of this and to recommend they maintain a normal intake of food, with emphasis on liberal protein intake.

While precipitation of diabetes, peptic ulcer, osteoporosis, and psychosis can be expected to appear rarely from ARISTOCORT, they must be searched for periodically in patients on long-term steroid therapy.

Traditional precautions should be observed in gradually discontinuing therapy, in meeting the increased stress of operation, injury and shock, and in the development of intercurrent infection.

There is one overriding principle to be observed in the treatment of any disease with ARISTOCORT. *The amount of the drug used should be carefully titrated to find the smallest possible dose which will suppress symptoms.*

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Lederle

The Promise of Aristocort in Rheumatoid Arthritis

ARISTOCORT *therapy has been intensely and extensively studied for periods up to one year on 292 patients with rheumatoid arthritis.*

Significant is the fact that most patients were *severe* arthritics, transferred to ARISTOCORT from other corticosteroids because satisfactory remission had not been attained, or because the seriousness of collateral hormonal effects had made discontinuance desirable.

Results of treatment

Freyberg and associates[1] treated 89 patients with rheumatoid arthritis (A. R. A. Class II or III and Stage II or III). Of these, 51 were on ARISTOCORT therapy from three to over 10 months. In all but a few patients, satisfactory suppression of rheumatoid activity was obtained with 10 mg. per day. Thirteen were controlled on 6 mg. or less a day, and for periods to 180 days. The investigators reported therapeutic effect in most cases to be A. R. A. Grade II (impressive) and that marked reduction in sedimentation rates occurred.

Another interesting observation in this study: Of the 89 patients treated, 12 had active ulcers, developed from prior steroid therapy. *In six patients, the ulcers healed while on doses of* ARISTOCORT *sufficient to control arthritic symptoms.*

Hartung[2] treated 67 cases of rheumatoid arthritis for up to 10 months. He found the optimum maintenance dose to be 11 mg. per day. Nineteen of these patients were treated for six to 10 months with an "excellent" therapeutic response.

Dosage and course of therapy

The initial dosage range recommended is 14 to 20 mg. per day—depending on the severity and acuteness of signs and symptoms. Dosage is divided into four parts and given with meals and at bedtime. Anti-rheumatic effect may be evident as early as eight hours, and full response often obtained within 24 hours. This dosage schedule should be continued for two or three days, or until all acute manifestations of the disease have subsided, whichever is later.

The maintenance level is arrived at by reduction of the total daily dosage in decrements of 2 mg. every three days. The range of maintenance therapy has been found to be from 2 mg. to 15 mg. per day—with only a very occasional patient requiring as much as 20 mg. per day. Patients requiring more than this should not be long continued on steroid therapy.

The aim of corticosteroid therapy in rheumatoid arthritis is to suppress the disease only to the stage which will enable the patient to carry out the required activities of normal living or to obtain reasonable comfort. The maintenance dose of ARISTOCORT to achieve this end is arrived at while making full use of all other established methods of controlling the disease.

ARISTOCORT is available in 2 mg. scored tablets (pink); 4 mg. scored tablets (white). Bottles of 30.

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Lederle

The Promise of Aristocort in Respiratory Allergies

About 200 patients with respiratory allergies have been treated with ARISTOCORT *for continuous periods up to eight months.*

Results of treatment

Sherwood and Cooke[1,2] gave ARISTOCORT to 42 patients with bronchial asthma and allergic rhinitis. Average dose needed to control the asthmatic group was approximately 6 mg. per day (range, 2 to 14 mg.). Results, which were called "good to excellent" in all but four, were achieved on one-third less than similarly effective doses of prednisone or prednisolone.

The investigators noted other major improvements in ARISTOCORT therapy over the older steroids. There was no increase in blood pressure in any patient: *on the contrary, in 12 patients, there was reduction of pressure when they were transferred to* ARISTOCORT. One patient had required auxiliary antihypertensive drug therapy; over a nine-week period on ARISTOCORT, the pressure gradually fell from 206/100 to 136/79. In another case, the pressure slowly dropped from 205/105 to 154/86.

The number of cases in which these investigators tried ARISTOCORT in allergic rhinitis was not large enough to provide significant averages. However, the range of effective therapy was from 2 to 6 mg. per day. These strikingly low daily doses resulted in control of all signs and symptoms.

Schwartz[3] treated 30 patients with chronic, intractable bronchial asthma. At an average daily dose of 7 mg., he reported "good to excellent" results in all but one. Spies,[4] Barach[5] and Segal,[6] reported similar results at average daily maintenance doses of 4 to 10 mg. of ARISTOCORT.

Dosage and course of therapy

The initial dosage range recommended is 8 to 14 mg. of ARISTOCORT daily. Although a rare, very severe case may require more than this on the first day of therapy, these dosages will usually result in prompt alleviation of dyspnea, wheezing and cyanosis. Patients are soon able to carry out a normal span of daily activity.

The maintenance level is arrived at by reduction of the total daily dose every three days in decrements of 2 mg.; in the over-all series, the average daily dose for bronchial asthma is approximately 8 to 10 mg. and for allergic rhinitis, 2 to 6 mg. per day. All total daily doses should be divided into four parts and given with meals and at bedtime. As in every condition where corticosteroids are employed, each patient's treatment should be individualized and the maintenance arrived at by careful titration against signs and symptoms of disease.

Patients with chronic bronchial asthma may require steroid therapy for several months. And since asthma may be associated with cardiac disease, especially in the older age groups, ARISTOCORT is particularly useful because of its ability to cause excretion of sodium and water.

ARISTOCORT is available in 2 mg. scored tablets (pink); 4 mg. scored tablets (white). Bottles of 30.

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The Promise of Aristocort

in Nephrotic Syndrome

◊ *Fourteen patients with the nephrotic syndrome have been treated with* ARISTOCORT *for continuous periods of up to six weeks.*

Results of treatment

Hellman and associates[1,2] noted that ARISTOCORT, because of its favorable electrolyte effects, may well be the most desirable steroid to date in treatment of the nephrotic syndrome. However, thus far its use has been reported in only 14 children, of whom 8 had a complete diuresis and disappearance of all abnormal chemical findings. Four of the patients had diuresis, but continued to show some abnormal chemical findings, while two patients with signs of chronic renal disease failed to respond.

Dosage and course of therapy

In order to produce maximal response, 20 mg. should be given daily until diuresis occurs. The dose should then be decreased gradually and maintained around 10 mg. a day. After the patient has been in remission for some time, it may be advisable to diminish the dose gradually and discontinue ARISTOCORT.

in Pulmonary Emphysema and Fibrosis

◊ *Eleven patients with pulmonary emphysema and/or fibrosis were treated with* ARISTOCORT *for continuous periods of over two months.*

Results of treatment

Only small series of cases observed by Barach,[3] Segal,[4] and Cooke,[5] are available. Barach treated patients who were not adequately controlled by prednisone, with the same dose of ARISTOCORT with significant improvement.

Dosage and course of therapy

The initial suppressive dose range recommended is 10-14 mg. daily. Frequently, there is a prompt decrease in cyanosis and dyspnea, with increase in vital capacity.

The average maintenance dose level was 8 mg. a day. If it is desired to maintain a patient on continuous therapy for some months, dosages as low as 2 mg. a day have been successful. All decreases in dosage should be gradual and at a rate of 2 mg. decrements in total daily amount, every two to four days. The daily dosage is divided into four parts and given with meals and at bedtime.



in Neoplastic Diseases

Forty-four children and adults have been given ARISTOCORT *for palliative treatment of acute leukemia, chronic lymphatic leukemia, lymphosarcoma, lympholeukosarcoma and Hodgkin's disease.*

Results of treatment

Farber[6] has treated 22 children with acute leukemia for an average of three weeks. Of the 17 observed long enough to judge the efficacy of the medication, he rated five as excellent, three as good, two as fair and seven as poor responses.

Hellman and associates[7] gave ARISTOCORT to a group of patients with the various lymphomas in doses of 40 to 50 mg. a day—occasionally up to 100 milligrams. Treatment was continued in some cases for 17 weeks. Response was classified as good for the palliative purposes for which the drug was given.

Dosage and course of therapy

Massive initial suppressive doses of 40 to 50 mg. per day in children (1 mg./kg./day) and up to 100 mg. a day in adults have been administered.

Responses to any specific dosage in these conditions vary so widely that only a general dosage range can be indicated. Treatment must be individualized; rate of reduction in dosage and determination of maintenance levels cannot be categorized.

Miscellaneous

Patients with various other diseases have been treated by several clinical investigators. These include patients with osteoarthritis, acute bursitis, rheumatic fever, spondylitis, other "collagen-vascular" diseases (dermatomyositis, etc.), thrombocytopenic purpura, chronic eosinophilia, hemolytic anemia, diuretic-resistant congestive heart failures, and adrenogenital syndrome.

There have not been sufficient patients in any of the above categories to permit definitive treatment schedules to be finally established for ARISTOCORT. Additional studies are now in progress and physicians desiring information on any of these diseases are requested to write to Lederle Laboratories, Pearl River, New York for available data.

ARISTOCORT is available in 2 mg. scored tablets (pink); 4 mg. scored tablets (white). Bottles of 30.

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The Promise of Aristocort

in Inflammatory and Allergic Skin Diseases

◊ *Over 200 patients with allergic and inflammatory skin diseases (including psoriasis, atopic dermatitis, exfoliative dermatitis, pemphigus, dermatitis herpetiformis, eczematoid dermatitis, contact dermatitis and angioneurotic edema) have been treated continuously with* ARISTOCORT *for periods of up to eight months.*

Results of treatment

Rein and associates[1] treated 26 patients with severe dermatitis. Twenty-four had been on prednisone when changed to ARISTOCORT. While some had found satisfactory symptomatic relief, others had also developed side effects—moon face, buffalo hump, increased appetite with excessive weight increases and gastro-intestinal disturbances.

These investigators determined the equivalent dosage of ARISTOCORT to be approximately two-thirds that required to control symptoms on the previous corticosteroid. Thirteen of the 26, who had developed moon face, noted either an actual decrease or no further increase when transferred to ARISTOCORT. In addition: *Voracious appetites disappeared, with loss of weight in 11 patients; there was no elevation in blood pressure, and no necessity to restrict sodium or administer supplemental potassium.* Sherwood and Cooke,[2] and Shelley and Pillsbury[3] obtained similar results in allied disorders.

Hollander[4] first observed that ARISTOCORT appears to have striking affinity for the skin and great activity in controlling such diseases as psoriasis, for which other corticosteroids have been indifferently effective. Shelley and Pillsbury,[3] in 50 cases of acute extending psoriasis found that over 60 per cent were markedly improved.

Dosage and course of therapy

The recommended initial suppressive dose range is 14 to 20 mg. per day. In very severe cases, temporary dosages up to 32 mg. a day have been successfully employed. Once lesions are suppressed, gradually reduce dose to the maintenance level—which may be as low as 2 mg. per day.

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in Disseminated Lupus Erythematosus

◊ *Forty patients with disseminated lupus erythematosus were treated with* ARISTOCORT *for continuous periods of up to nine months.*

Results of treatment

Patients have responded very promisingly to therapy. Dubois[1] has had the largest single experience (28 cases) with ARISTOCORT in the treatment of this disease. He reported 25 of the 28 responded favorably.

Freyberg,[2] Hartung,[3] Hollander,[4] Spies,[5] and Segal,[6] each in smaller series of cases, reported similarly good therapeutic responses.

Dosage and course of therapy

The initial suppressive dose recommended is 20-30 mg. daily. Once the desired effect is achieved, the dose should be reduced gradually to maintenance levels (3 to 18 mg. per day).

In severely ill patients large doses may be required for several days in order to preserve life. Even on these large doses, edema and sodium retention have not occurred.

ARISTOCORT is available in 2 mg. scored tablets (pink); 4 mg. scored tablets (white). Bottles of 30.

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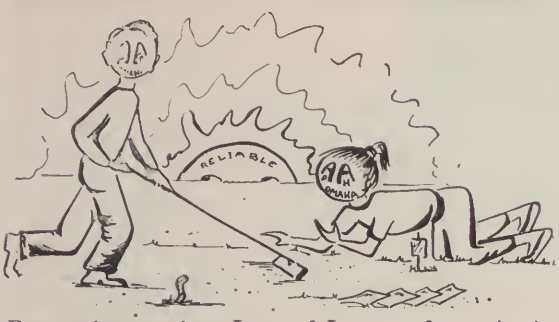
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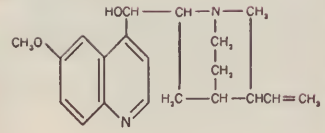
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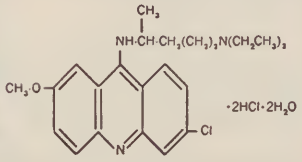
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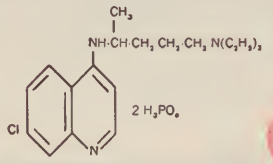
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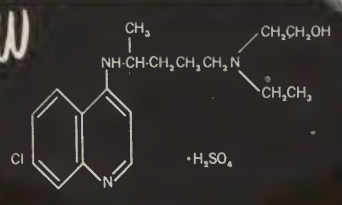
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REFERENCES:

1. Scherbel, A.L., Schuchter, S.L., and Harrison, J.W.: *Cleveland Clin. Quart.* 24:98, Apr., 1957.
2. Schoch, A.G., and Alexander, L.J.: The Schoch section, *Bull. A. Mil. Dermatologists* 5:25, Nov., 1956.
3. Cornbleet, Theodore: Arch. Dermat. 73:572, June, 1956.

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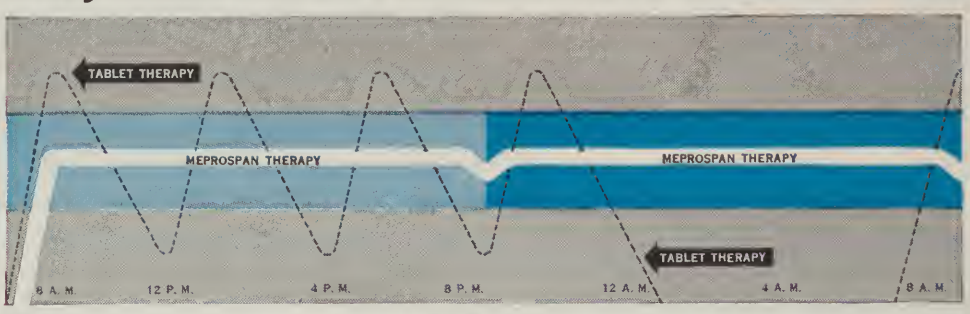
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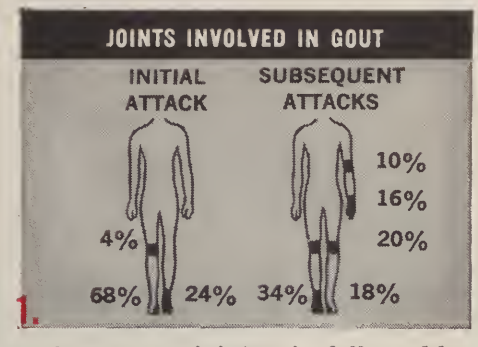
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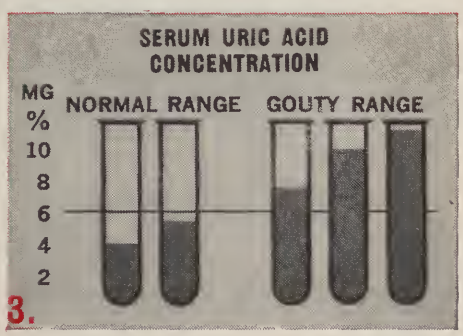
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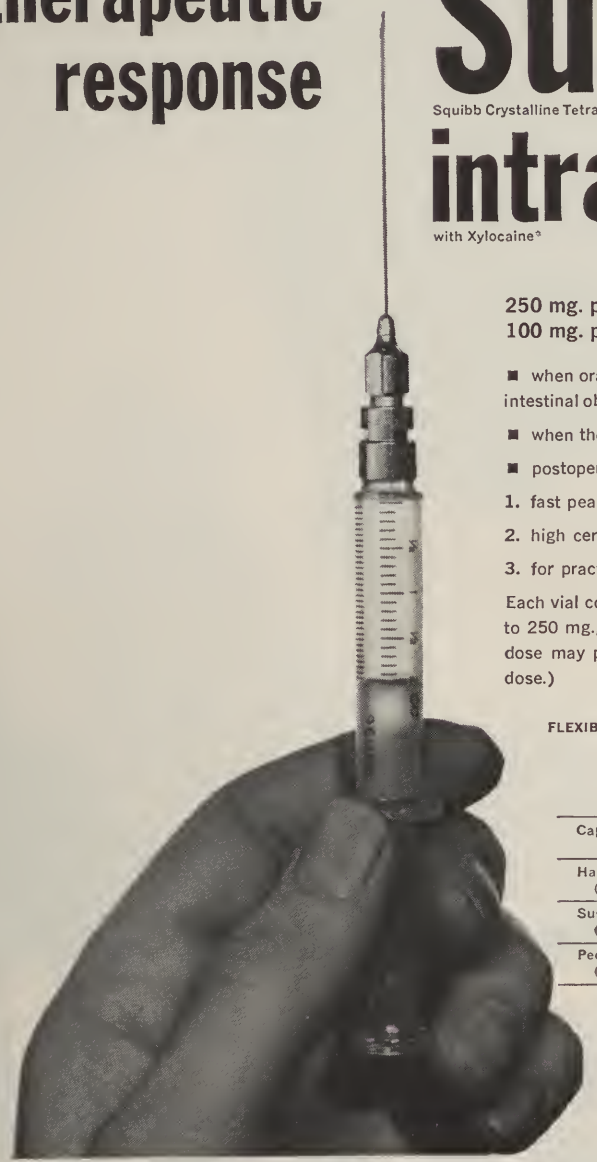
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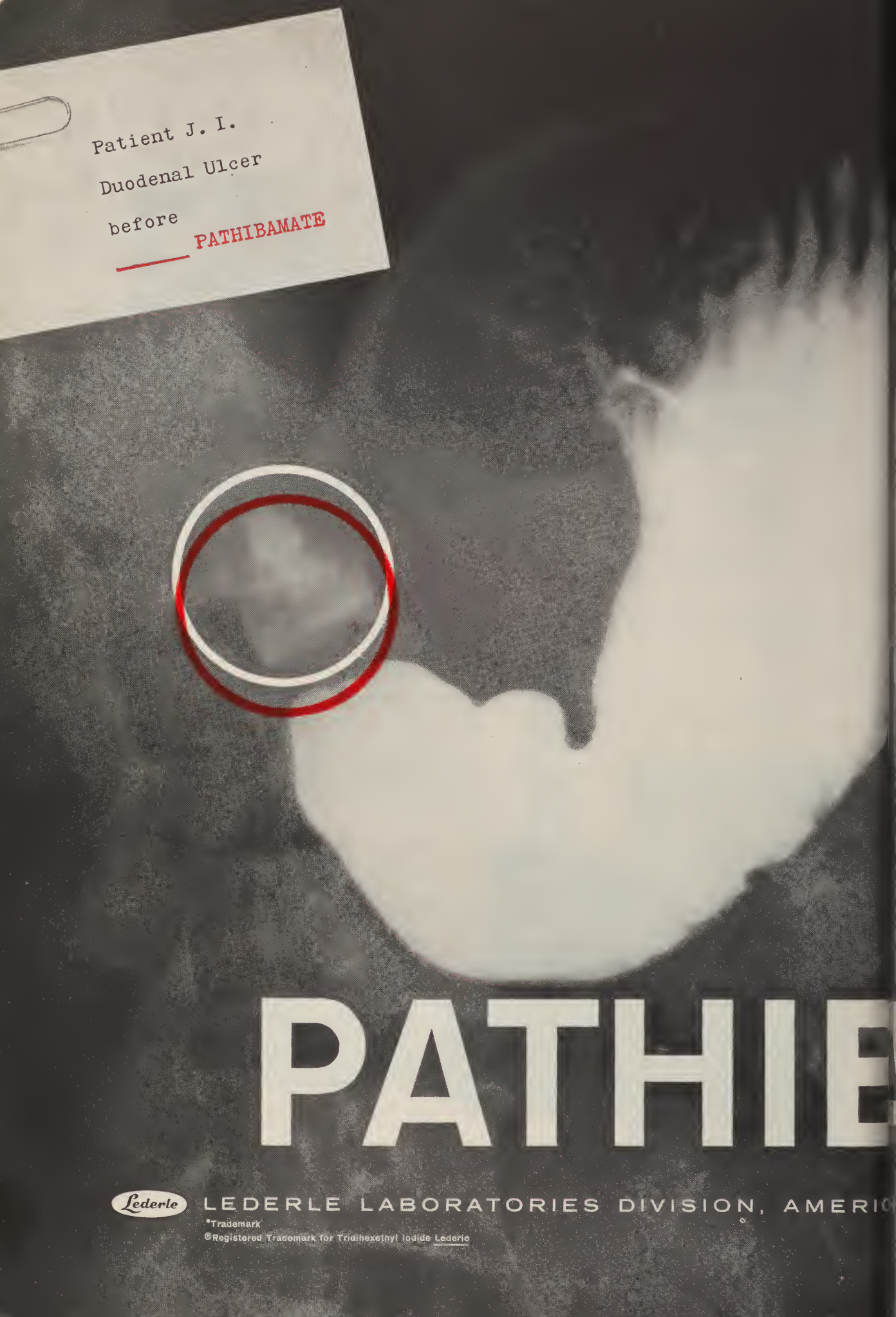
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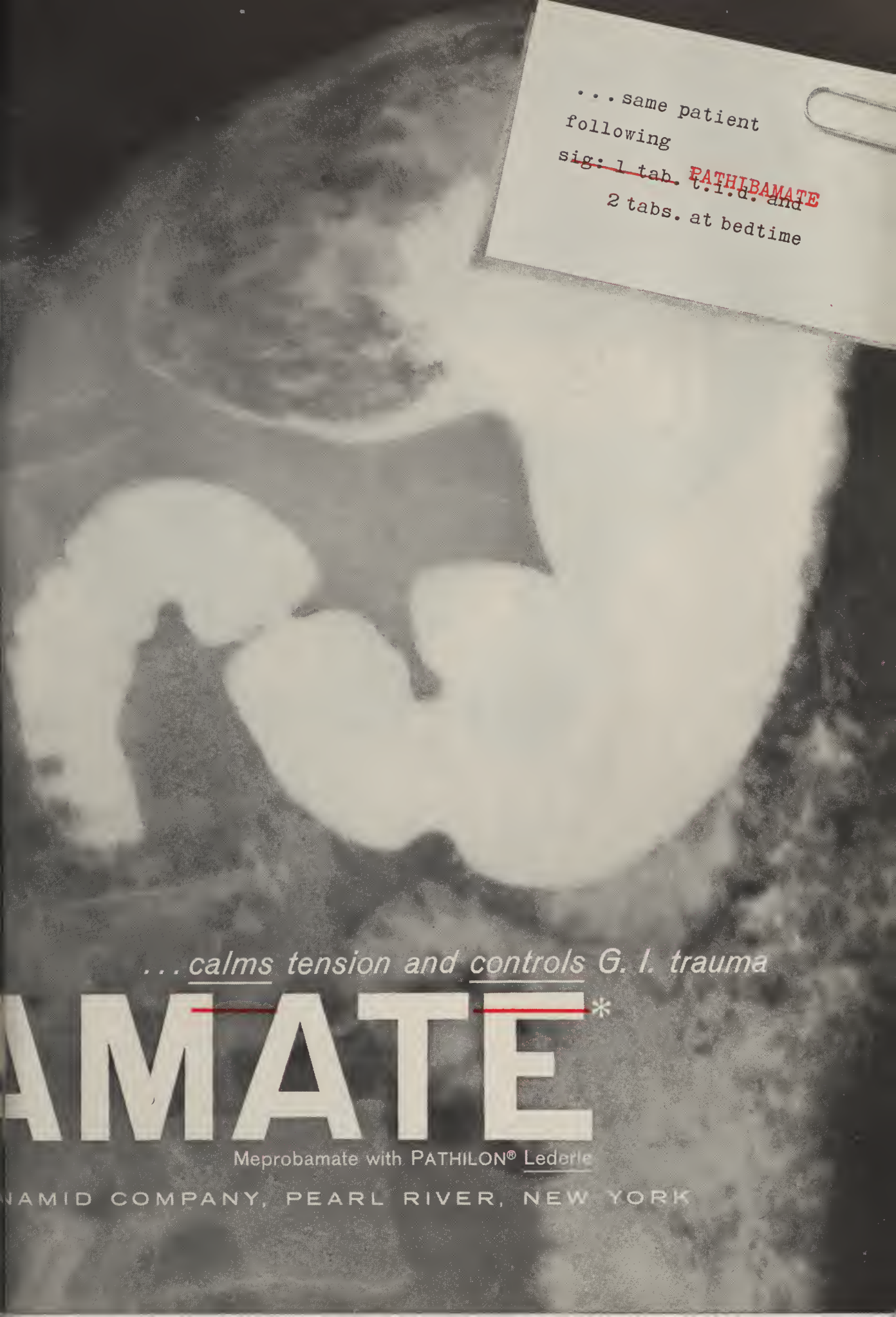
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References: 1. Spies, T. D., et al.: J.A.M.A. 159:645, 1955. 2. Spies, T. D., et al.: Postgrad. Med. 17:1, 1955. 3. Gelli, G., and Della Santa, L.: Minerva Pediat. 7:1456, 1955. 4. Guerra, F.: Fed. Proc. 12:326, 1953. 5. Busse, E. A.: Clin. Med. 2:1105, 1955. 6. Sticker, R. B.: Panel Discussion, Ohio State M. J. 52:1037, 1956.

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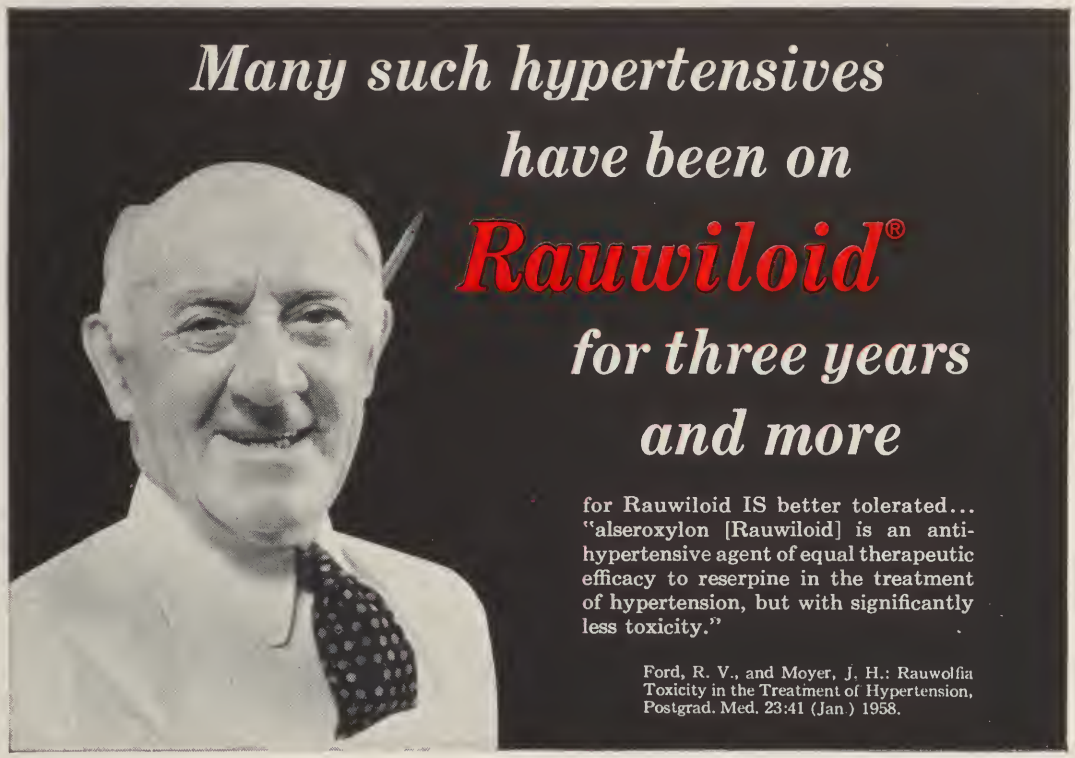
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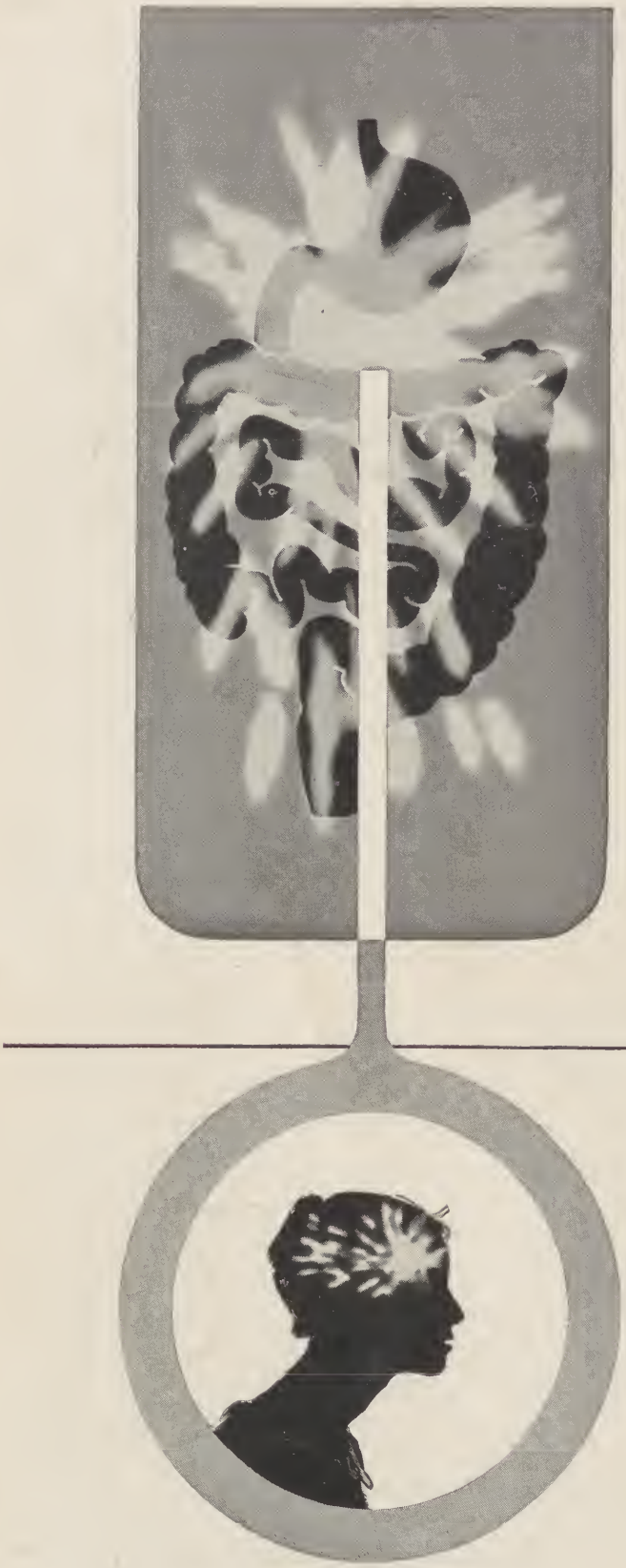
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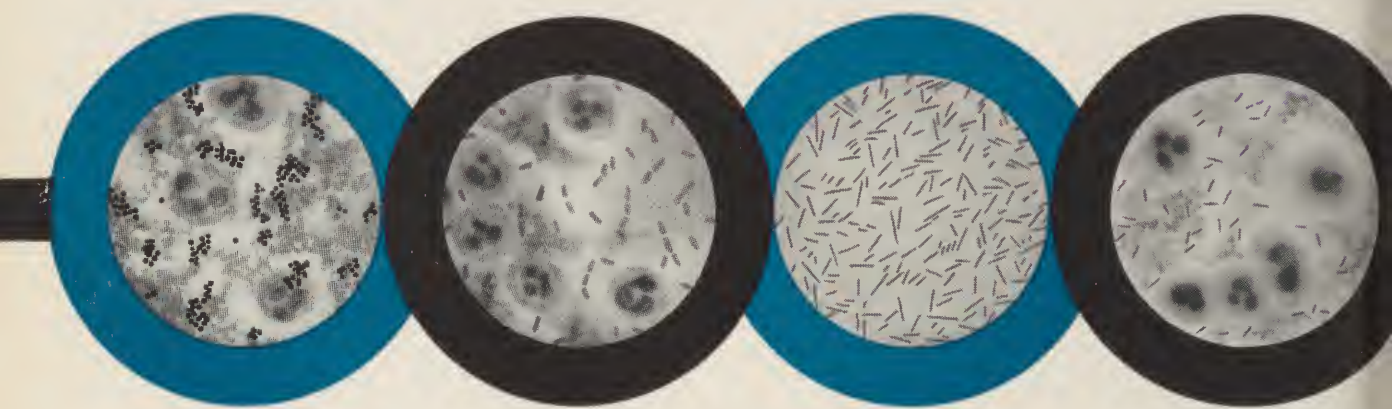
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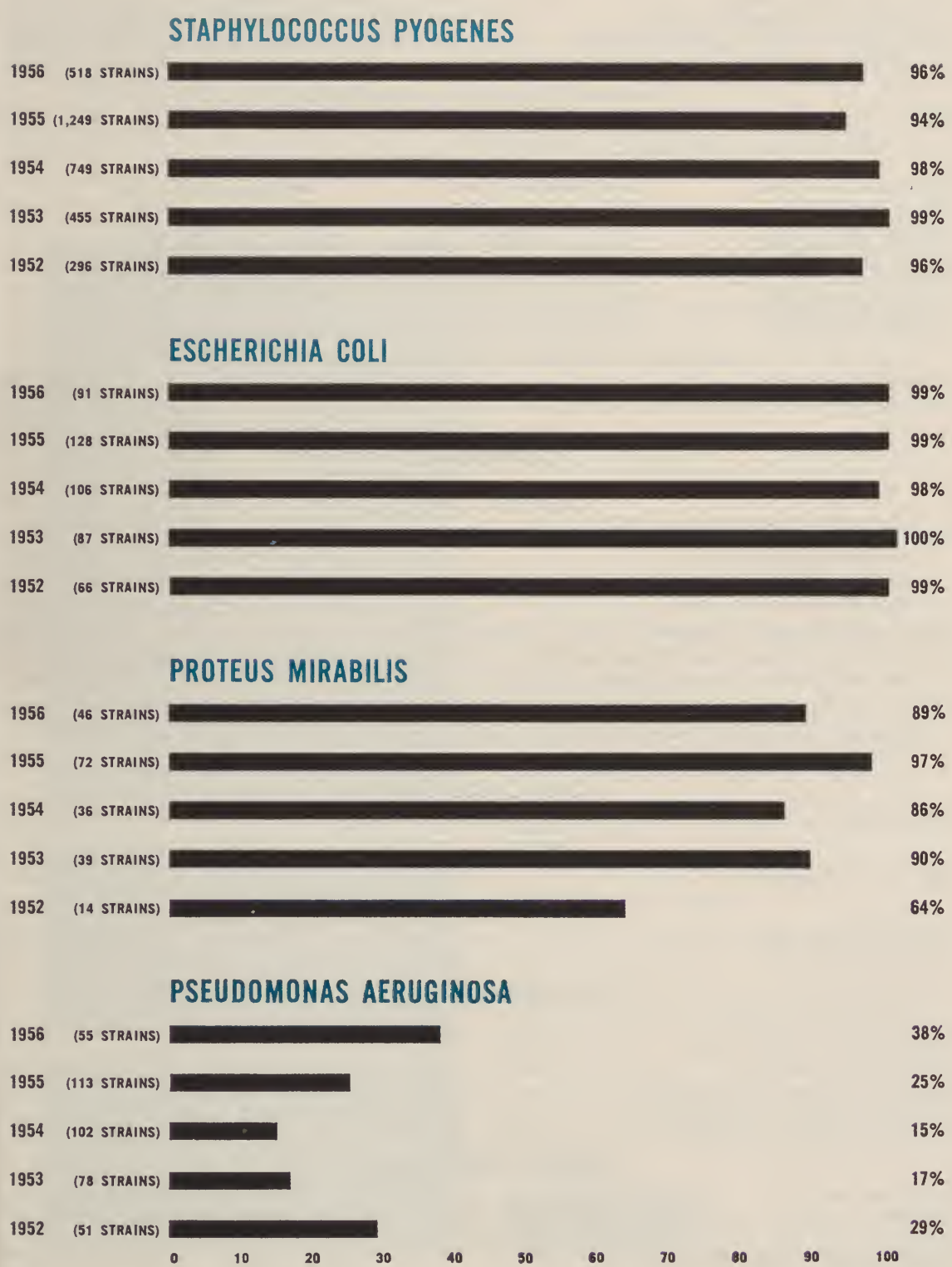
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REFERENCES: (1) Roy, T. E.; Collins, A. M.; Craig, G., & Duncan, I. B. R.: *Canad. M.A.J.* 77:844 (Nov. 1) 1957. (2) Schneierson, S. S. *J. Mount Sinai Hosp.* 25:52 (Jan.-Feb.) 1958. (3) Koch, R., & Donnell, G.: *California Med.* 87:313, 1957. (4) Waisbren, B. A., & Strelitzer, C. L.: A Five-Year Study of the Antibiotic Sensitivities and Cross Resistances of Staphylococci in a General Hospital, paper presented at Fifth Ann. Symp. on Antibiotics, Washington, D. C., Oct. 2-4, 1957. (5) Doniger, D. E., & Parenteau, Sr. C. M.: *J. Maine M. A.* 48:120, 1957. (6) Royer, A.: Changes in Resistance to Various Antibiotics of Staphylococci and Other Microbes, paper presented at Fifth Ann. Symp. on Antibiotics, Washington, D. C., Oct. 2-4, 1957. (7) Hasenclever, H. F.: *J. Iowa M. Soc.* 47:136, 1957. (8) Josephson, J. E., & Butler, R. W.: *Canad. M.A.J.* 77:567 (Sept. 15) 1957. (9) Rhoads, P. S.: *Postgrad. Med.* 21:563, 1957. (10) Holloway, W. J., & Scott, E. G.: *Delaware M. J.* 29:159, 1957.

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*Adapted from Roy and others.[1]

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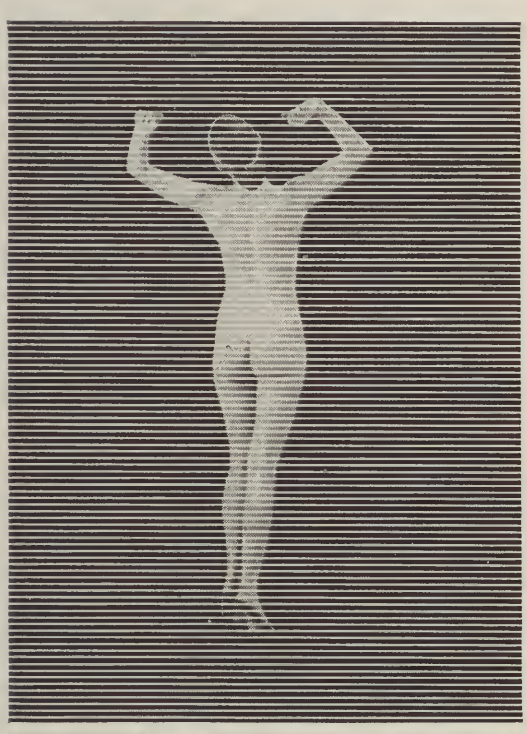
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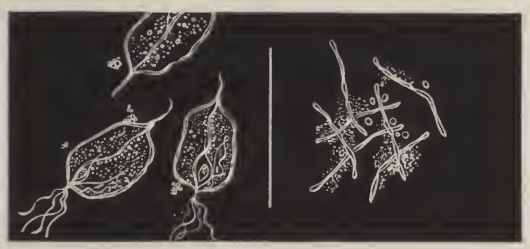
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SEARLE

PUBLIC HEALTH PAGE

Hearing Conservation Program

Russell E. Teague, M. D.
Commissioner of Health, Commonwealth of Kentucky

THE State Department of Health, through its Bureau of Maternal and Child Health, Division of School Health Services has operated a Hearing Conservation Program in the State of Kentucky since 1953. Recently a committee of representatives from the State Medical Association, The State Department of Education, Kentucky State Training School for the Deaf and interested voluntary organizations was organized to advise the State Department of Health in implementing the Hearing Conservation Program. Furthermore, Dr. Francis Kodman, Director of the Hearing Clinic at the University of Kentucky has been of great assistance in developing professional techniques and program design. Basically, the program operates in the following fashion.

Any county desirous of conducting a hearing screening program may request the assistance of State Department of Health personnel in conducting it. Since tests are administered only to school age children in the school setting, the survey must be jointly sponsored by the Board of Education and the Department of Health. When a request is received, one of three audiometry technicians employed by the State Department of Health goes into the county to train a group of volunteers to do the preliminary screening. These volunteers are usually recruited from one of the womens' civic organizations.

Testing is done only on second, fourth and sixth grade children. Puretone audiometers are used, with a stimulus of 15 decibels and frequencies from 250 to 12,000. Children who fail the first screening are rechecked by the volunteer. Those who fail the second screening are retested by one of the audiometry technicians. The results obtained by the audiometer technicians are further checked by our audiology consultant, Dr. Francis Kodman. Children who fail to pass the rescreening are referred to their own physicians for follow-up to determine the etiology and course of recommended therapy.

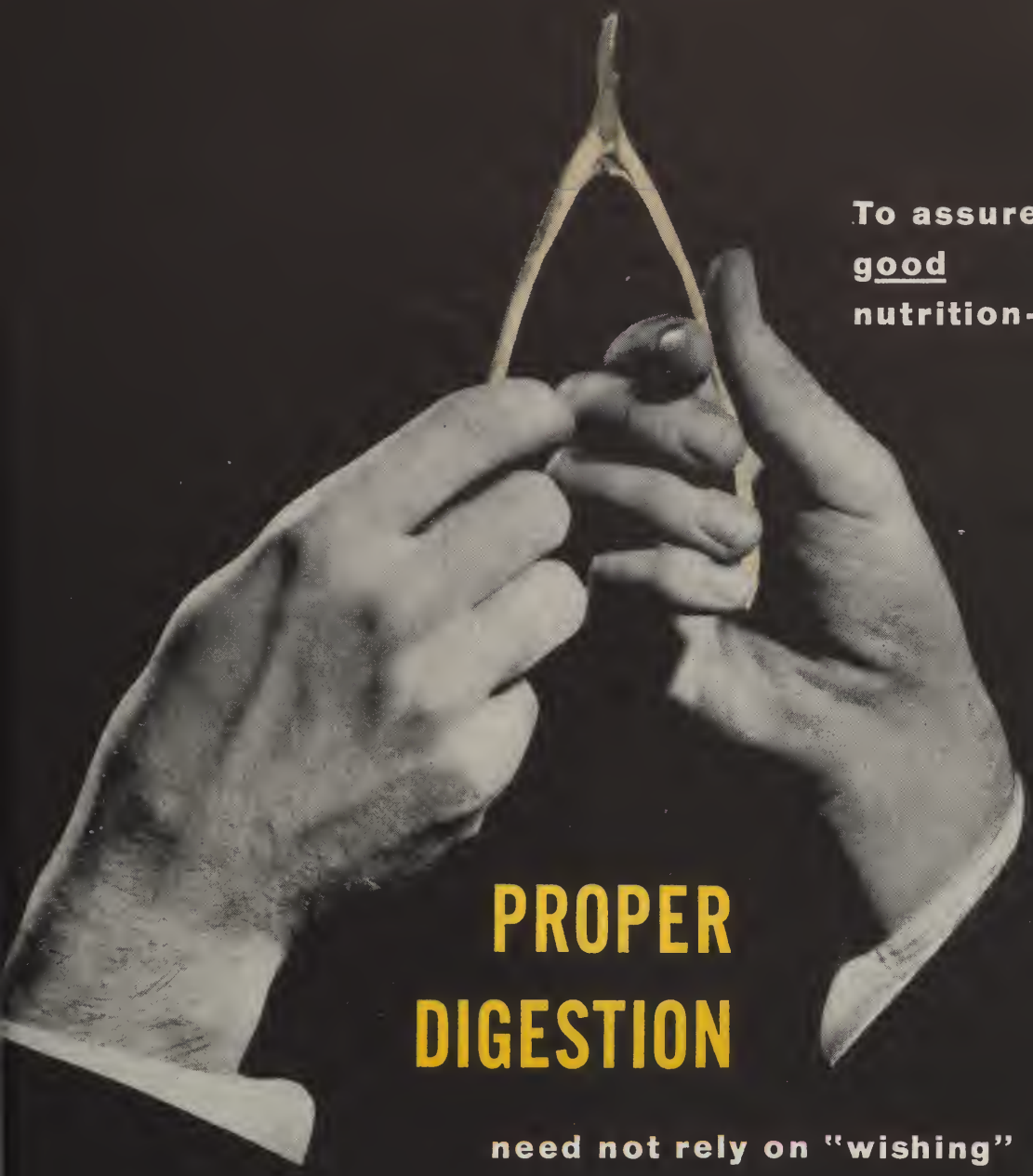
Counties desiring to sponsor hearing screening programs are requested to do careful planning to insure that this medical follow-up will be obtained. Fiscal courts or civic groups may be required to contribute funds for payment of physicians where needed. The Kentucky Society for Crippled Children has set aside a fund to be used for purchase of hearing aids for indigent children where indicated.

During recent years an attempt has been made to arrive at some estimate of the incidence of hearing loss in school age children through a study of the results of the hearing screening program. Representative counties, including both urban and rural were selected, a total of eleven counties in all. These counties were Bracken, Caldwell, Carlisle, Carter, Harrison, Jefferson, Ohio, Russell, Taylor, Trigg and Trimble.

A 20 decibel puretone loss at one or more frequencies was considered a significant loss requiring medical attention. Although the incidence based on this criterion varied from a high of 26.55% (Bracken County) to a low of 8.7% (Caldwell) the average incidence proved to be 14%. The latter figure is almost three times that named in the literature as an estimated incidence of significant loss in the school population for the nation as a whole (5%). If this figure of 14% may be applied to the entire school population in Kentucky it may be estimated that some 40,000 - 50,000 children have a hearing loss which requires some form of attention, either medical treatment or special education, or both.

The findings of this study brought to light several important considerations. First is the apparent need for a state-wide Hearing Conservation Program in order that all children with hearing loss may be identified. Limitations of personnel have prevented extension of the present program beyond 30 - 40 counties each year. Second is the need for a more effective program which would permit the etiology of the hearing loss to be established. A youngster may fail the test for reasons other than hearing loss. It is important to rule out mental retardation, emotional disturbance, educational retardation or psychogenic loss. Facilities for evaluating these factors are not readily available to physicians in most communities.

Plans for the coming year include the establishment of two Hearing Centers, one in the western section of the State, another in the eastern section. Each of these centers will serve a radius of approximately twenty counties and will make possible a more definitive diagnosis of the types of hearing loss found in children in those areas. One of these centers was made possible by a contribution from the Crusade for Children. The second was financed by Children's Bureau funds. Eventually it is estimated that six of these centers will be needed for the whole state. Other plans for expansion include the employment of an additional audiometer technician in order that more counties may be included in the screening programs.



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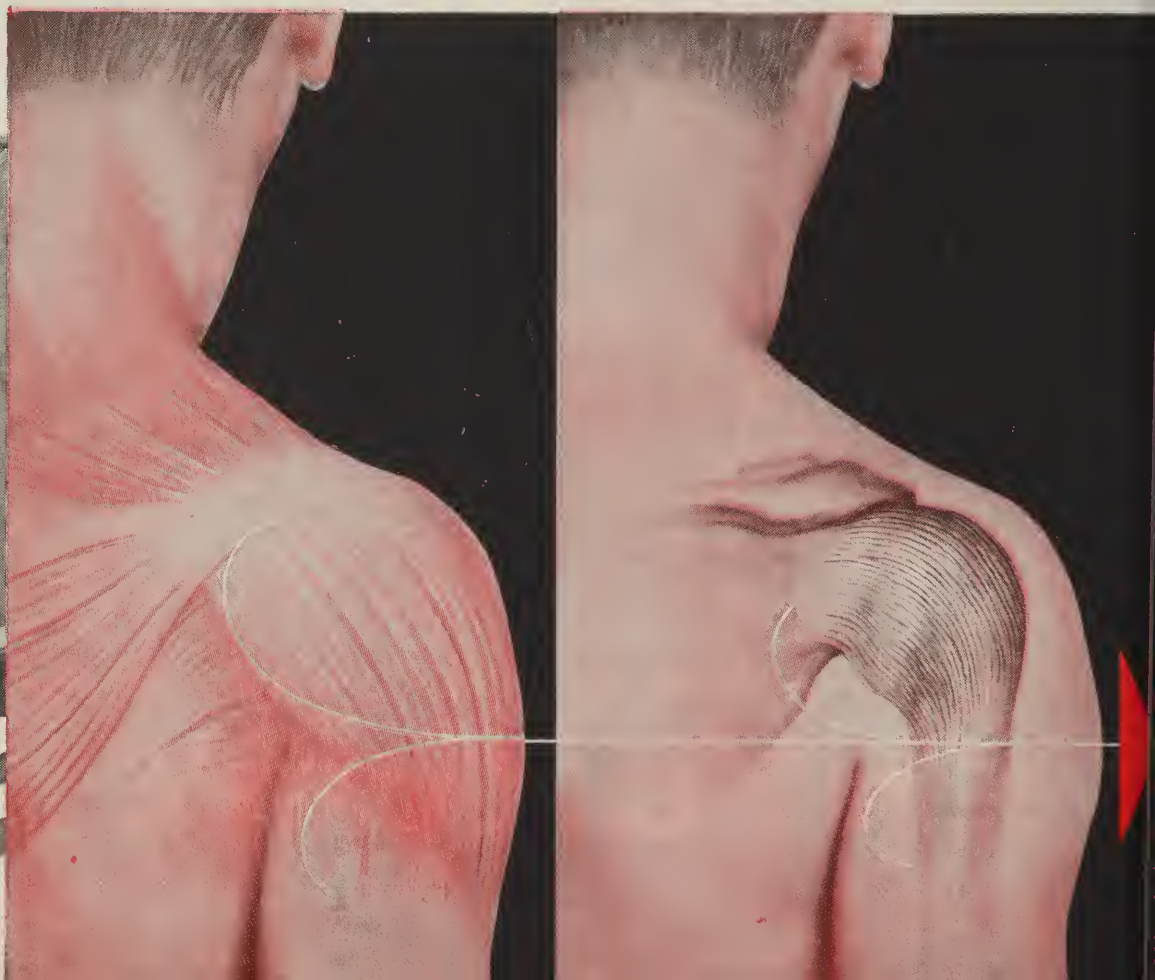
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1. Comroe's Arthritis: Hollander, J. L., p. 149 (Fifth Edition, Lea & Febiger, Philadelphia, Pa. 1953).
2. Merck Manual: Lyght, C. E., p. 1102 (Ninth Edition, Merck & Co., Inc., Rahway, N. J. 1956).

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IN THE BOOKS

Books Received

Following is a list of books received by the Association for review. Those considered of particular interest to Journal readers will be reviewed as space permits. All complimentary copies of books received are turned over to the University of Louisville-Jefferson County Medical Society Library. Inquiries concerning a particular book should be made to the KSMA Headquarters Office, 1169 Eastern Parkway, Louisville 17, Ky.

FAT CONSUMPTION AND CORONARY DISEASE: The Revolutionary Answer to this Problem: T. L. Cleave, M.R.C.P., surgeon, Royal Navy, and Percy Stocks, C.M.G., M.D., published by the Philosophical Library, Inc., New York, 1958.

ENDOCRINE PATHOLOGY OF THE OVARY: John M. Morris, M.D., and Robert E. Scully, M.D., published by the C. V. Mosby Company, St. Louis.

YOU CAN INCREASE YOUR HEART POWER: Peter J. Steincrohn, M.D., published by Doubleday and Company, Inc., New York.

ORTHOPEDICS FOR THE GENERAL PRACTITIONER: by William E. Kenney, M.D., and Carroll B. Larson, M.D.; Published by C. V. Mosby Company, St. Louis, September, 1957; 400 pages; price, $11.50.

The differential diagnosis and treatment of orthopedic conditions are given. There are 190 excellent descriptive sketches and photographs of patients, including a few bone x-rays.

The first chapter (124 of the 400 pages) concerns diseases and affections of new-borns and children up to 14 years of age. The remainder of the fourteen chapters is divided into regions according to trauma and disturbances affecting the anatomical areas, such as, "Disturbances of the Knee in the Adult."

Each chapter has an outline from which one may deduce the most likely diagonsis if given the patient's complaints. There is a short, pertinent chapter on tumors involving bone. Physical and occupational therapy is discussed. After each condition due to trauma, there is a brief discussion of how much time-loss is anticipated due to the injury.

This book is dedicated to "The Hard-working General Practitioner," to "—guide him in his orthopedic problems, lighten his burden, and make his professional life happier through a fuller understanding of this special branch of Medicine." It accomplishes its mission. For the medical student, as well as the general practitioner, it has much to offer for such a small volume.

Charles R. Hoffman, M.D.

SYMPOSIUM ON DISEASES AND SURGERY OF THE LENS: Edited by George M. Haik, M.D., St. Louis, The C. V. Mosby Co., 1957, 260 pages, illustrated, $10.50.

This volume is for the clinical, intra-ocular surgeon and is of definifite, every-day, practical help to him. It reports the proceedings of the excellent Fifth Annual Session of the New Orleans Academy of Ophthalmology conducted in 1956 by six distinguished, senior American ocular surgeons and one ocular biochemist.

The surgeons initially present a series of twelve essays: Embryology of the Lens, Types of Congenital and Juvenile Cataracts, and Surgery of Congenital Cataract by Frederick C. Cordes; Diagnosis and Classification of Adult Cataracts by Harvey Thorpe; Techniques of the Cataract Operation by Derrick Vail; Surgery of Complicated Cataracts, Complications during Extraction, and Complications in Congenital Cataract Surgery by Paul A. Chandler; Healing of the Cataract Incision, and Complications of Wound Healing by John H. Dunnington; Vitreous Changes before and after Cataract Surgery, and Lens Induced Uveitis and Glaucoma by S. Rodman Irvine.

Nine round table discussions under the stimulus of written questions from the audience are then reported almost verbatum. These are moderated by James H. Allen, William B. Clark and George H. Haik, all well qualified ophthalmic teachers.

The reporting is well edited and yet reflects the stimulation of healthy give and take among substantial experts in the field. The book is pleasant reading to any cataract surgeon and clearly pictures the best alternatives in current American practice. The volume does not pretend to be encyclopaedic in scope. Historical details and extensive bibliographic references are properly omitted or else appear only in abbreviated form at points where they unmistakably contribute to the train of practical thought. As with most Mosby books, the technical preparation and reproduction of the many illustrations are excellent.

Arthur H. Keeney, M.D.

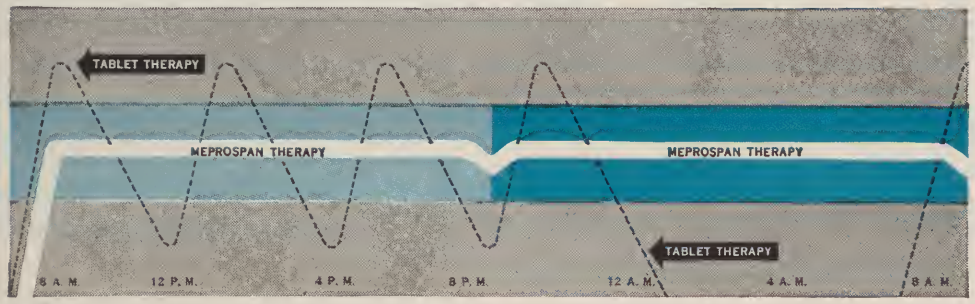
THE INCURABLE WOUND AND FURTHER NARRATIVES OF MEDICAL DETECTION: by Berton Rouche; published by Little, Brown and Company, Boston; 1957; 177 pages; price, $3.50.

The "Eleven Blue Men," published in 1954, has attained a unique place in the world of whodunits. Mr. Roueche was awarded Lasker awards for two of the stories included therein and the coveted Raven by the Mystery Writers of America for his contributions. The "Incurable Wound" seems to have matched Mr. Roueche's earlier book in all respects. Although this latest addition has fewer tales and more technical ex-

(Continued on page 479)

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message from the President

Why?

IT is difficult to reconcile the number of interns in Kentucky with the number of graduates from the University of Louisville School of Medicine. There are usually approximately 90 graduates. And, approximately 60 of these graduates go out of Kentucky for their internship.

An analysis of the graduates in 1956 revealed the following:

1. There were 92 graduates, of which approximately 20 were out of state residents.

2. 64 graduates went out of Kentucky for their internship

   11 interned in Government Hospitals

   18 interned in Private Hospitals

   35 interned in Teaching Hospitals

3. 28 graduates took their internship in Kentucky

   Private Hospitals—15

   Teaching Hospitals—13

4. 53 percent of graduates went to Teaching Hospitals

   35 percent of graduates went to Private Hospitals

   12 percent of graduates went to Government Hospitals

From this it is apparent that Kentucky is training medical students for the undue benefit of intern programs out of the state of Kentucky.

The results of the Matching Plan for internships for 1958-59 are as follows:

Kentucky Hospitals	Sought	Obtained No.	%	% of All in Ky.
St. Elizabeth	12	2		
Good Samaritan	9	0		
St. Joseph	8	0		
Louisville General	22	9		
	4	4		46.6%
	8	1		
Norton Infirmary	6	0		
St. Anthony	5	1		
St. Joseph Infirmary	16	13		43.3%
Sts. Mary & Elizabeth	4	0		
	94	30	32%	

1. Of 8 hospitals 4 received 0 interns
2. Of 8 hospitals 2 received 20% or less of request
3. Of 8 hospitals 2 received 40% or more of request
4. No hospital fulfilled quota
5. 90% of interns appointed in Kentucky went to 2 hospitals
6. University Hospital took 46% of all interns in Kentucky

To ask a few questions:

Who is advising the students regarding internship?

Are they being advised to go out of the state of Kentucky?

If so, why?

Are they being advised to intern in Kentucky?

If not, why not?

If approximately two-thirds of the graduates live in Kentucky, and will eventually practice in Kentucky, why don't they intern in the area in which they will practice?

Are the Kentucky Hospital internships so bad that they do not warrant internships?

Why have a national group meddling in intern placement?

Why the Matching Plan?

Why?

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1. Russek, H. I.: Postgrad. Med. *19*:562 (June) 1956.

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From the Files of the

Committee for the Study of Maternal Mortality

CASE No. 1: A 39-year-old gravida 8, para 7, whose E.D.C. was March 17, 1957, was admitted to the hospital at 9 AM on January 2, 1957. The patient had consulted her physician on one occasion in early pregnancy. At that time, her hemoglobin was 9.1 grams, hematocrit 29, and serology negative. No other findings were reported.

The patient did not see a physician again until the day of admission when she apparently was in labor. She gave a history of having had bleeding prior to admission in an amount about equal to a period. On admission, she was not having any bleeding. Approximately six hours after admission, a vaginal examination was performed, and the attending physician thought the cervix to be completely dilated. He artificially ruptured the membrances. Shortly thereafter, profuse bleeding began and a consultant was called. The latter suggested that an infusion of 1000 cc. glucose with 10 mms of pitocin added be started and that blood be obtained.

When the consultant saw the patient she was bleeding profusely and was receiving blood. His examination revealed that the cervix was not completely dilated, the placental edge was felt to hang down along the posterior lip of the cervix and a transferse lie with shoulder presenting was encountered. Prior to his examination, the infusion was stopped and ether anaesthesia given.

He recommended immediate Caesarian, which was done. The abdomen was opened under local anaesthesia; nitrous oxide, oxygen and sodium pentothal were given as supplements. Because the patient was poorly relaxed and retching, a classical section was performed. While closing the peritoneum the patient's pulse became unobtainable and shortly after closure of the skin, no heart beat could be obtained. The chest was opened, cardiac massage instituted and normal heart rhythm returned in ten to fifteen minutes. Further profuse vaginal hemorrhage occurred. The patient received a total of five pints of blood prior to and during surgery and another four pints following surgery. In addition two units of Dextran was given.

For a short time following surgery, the patient's condition seemed satisfactory, but respirations then became irregular and death occurred approximately four hours following the caesarian.

Autopsy was performed and was non contributory. Findings were compatible with death due to hemorrhage and cardiac arrest.

Comment

Having the distinct advantage of hindsight, the committee felt there were several preventable factors in this case.

Certainly, there was an element of the patient's failure to avail herself of prenatal care. An abnormal presentation could have been known to exist and the physician forewarned of possible complications.

The attending physician mistakenly thought the cervix was completely dilated. Never-theless it was felt he erred in judgement by artificially rupturing the membranes in the absence of engagement of the presenting part. It was felt that rupture of the membranes possibly caused separation of a low lying portion of placenta and produced hemorrhage. If the physician was not satisfied with the progress of labor, the consultant should have been called before active measures were attempted.

As it happened, the consultant erred in ordering pitocin infusion in the presence of a transferse lie. It is understandable, however, that this was done in an effort to control hemorrhage until complete facts could be ascertained. This therapy was discontinued as soon as he examined the patient and established the correct diagnosis.

There was no criticism of the management of the case after the diagnosis was established.

If the conclusions of the committee are correct, this death was due to hemorrhage followed by cardiac arrest and not the reverse as indicated on the death certificate.

**This is the first of a series of discussions which will appear monthly on a trial basis.*

little
How to win friends ...



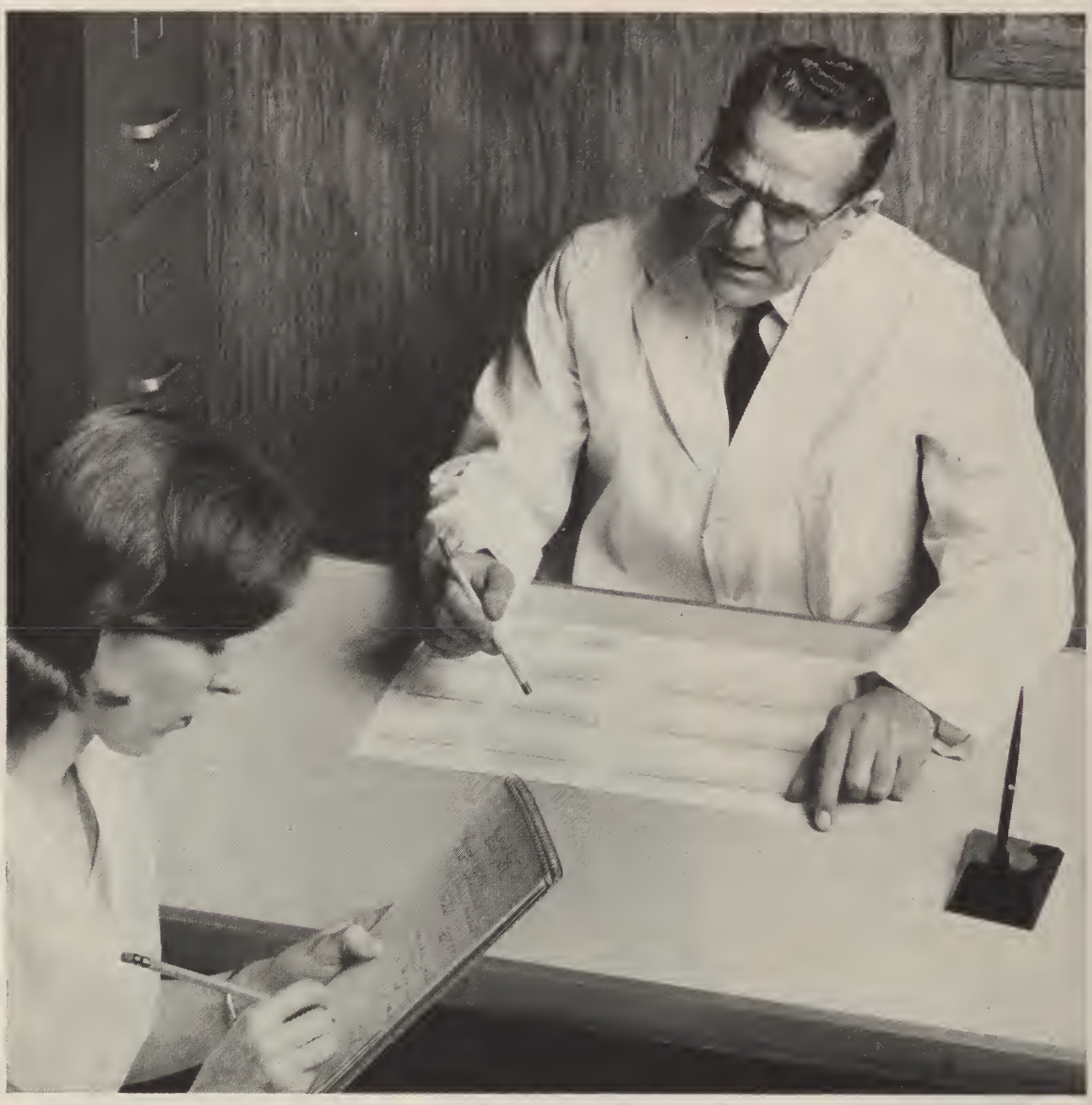
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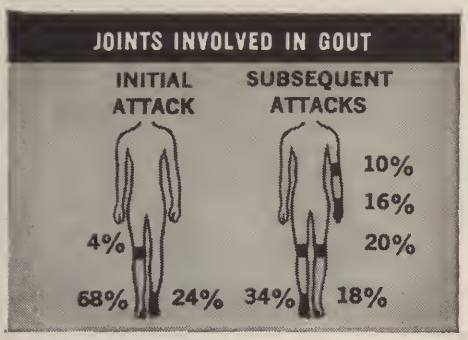
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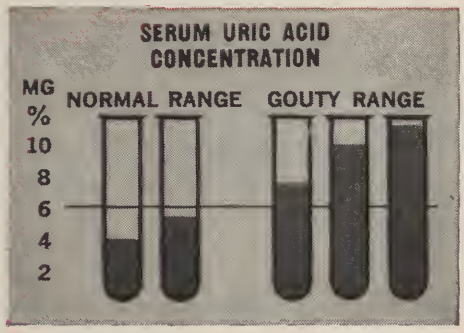
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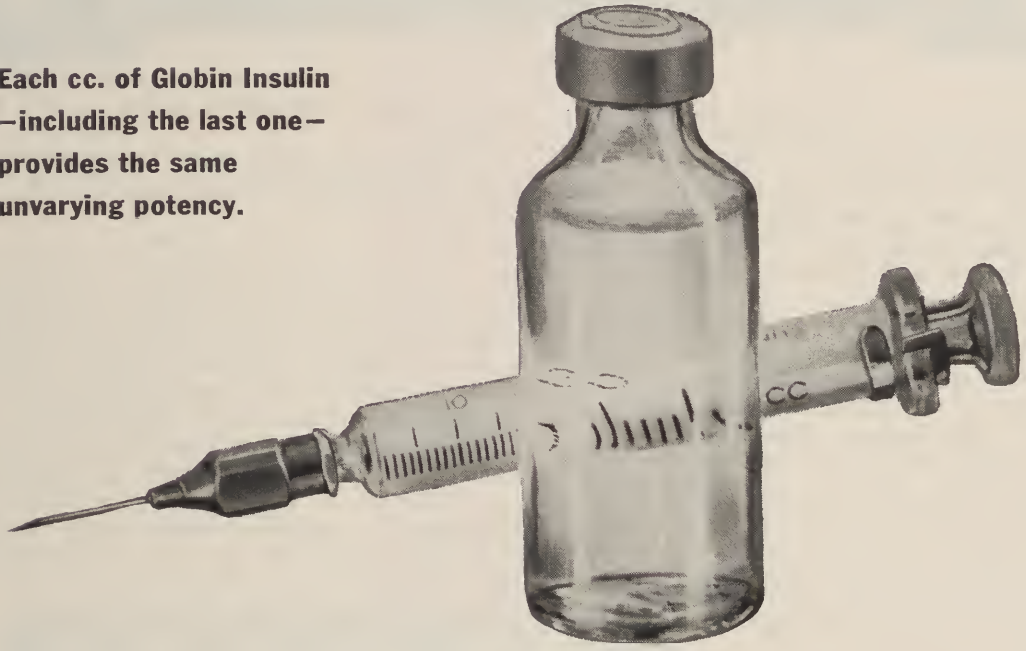
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WASHINGTON NEWS DIGEST

Washington, D. C.—The recession continues to influence the course of much legislation, as Congress points toward the windup of its session. Even in the health fields, bills that promise in one way or another to alleviate unemployment appear to have priority. At the same time, federal departments are favoring construction grants to projects that can be started without much delay.

In legislation, here are some of the developments:

1. Liberalizations in unemployment compensation and in social security are receiving constant attention on Capitol Hill. At this writing, the bill to extend the period for unemployment compensation payments is making progress. There is the possibility also that it will make participation mandatory for all employers.

Prominent among proposed changes in the social security program itself is the Forand bill for free hospitalization and in-hospital medical care and surgery for persons entitled to social security benefits. It is being pushed by the AFL-CIO and by some liberal Democrats, and opposed by the American Medical Association and a growing group of other organizations. The opposition is convinced that the Forand bill is unnecessary, that it would be far more costly than anticipated, and that it would point the way to a broad national medical care plan for all persons covered by social security.

2. A controversial bill to vastly increase money available for grants for community facilities—waste plants, hospitals, state medical schools included—is active in Congress. One proposal is to vote a billion dollars, to be lent out (at about 3 1/2% interest for 50 years) to communities. The objective here, as in many other measures, is to put people to work on construction projects.

Federal agencies have evolved a number of schemes to get U. S. dollars into circulation faster, and are attempting to work out others. In each case described below, no additional appropriation is involved; money is shifted from a project that is getting a slow start to one that is about ready to begin construction. Also, all totals given represent amounts to be spent by the sponsors as well as the federal government. Here are arrangements already made:

1. In January, the Hill-Burton hospital construction program called for U. S. grants to start buildings valued at $381 million; this figure has been stepped up to $405 million by July 1.

2. Between January and July 1, the original plan was to allocate enough money to start $120 million in construction for health research plants. This has been increased to $182 million.

3. Before the recession became so prominent an issue, the plan was to grant enough U. S. money to start construction of $170 million in sewage plants. Under pressure, the total has been increased to $215 million.

In most cases, when a project is delayed and thus loses its allocation, the grant is re-scheduled for next fiscal year.

*** ***

American Medical Association is one of the four sponsors of a new Joint Council to Improve the Health Care of the Aged. The others are American Dental Association, American Hospital Association and American Nursing Homes Association.

The council already has authorized research in a number of directions to (a) analyze the health needs of the aged, (b) appraise available health resources for them, and (c) develop the best possible health care for them, regardless of their economic status.

Effects of this united front action should be felt when Congress takes up the Forand bill and other legislation pointed toward relief for the aged.

An article on the Council is on page 465 of the organization section.

American Medical Association is asking Congress to strengthen the Civil Aeronautics Administration's medical department so it can properly supervise fliers' physical examinations and advise on other aviation medical matters. AMA also is recommending that an office of civil air surgeon and a medical research laboratory be established within CAA.

Congress has under consideration several plans for reorganizing the Defense Department, two of which would result in elimination of the office of Assistant Secretary for Health and Medical matters.

Progress on appropriations bills indicates more money for research at the Institutes of Health, and at least $121.2 million (the same as this year) for Hill-Burton hospital construction.

Andrew Biemiller, top legislative man for the AFL-CIO, told a recent delegation just returned from visiting Capitol Hill: "Congressmen are falling all over themselves in wanting to do something in the recession. I think we can cash in on this."

Testifying before a House appropriations subcommittee, Secretary Folsom said coverage under major medical insurance has gone up almost 20-fold in the last five years.

Medicare is working up a new claim form that will have a check-list of common errors on the back; this is intended to eliminate much correspondence now necessary when the physician makes an error on the form.

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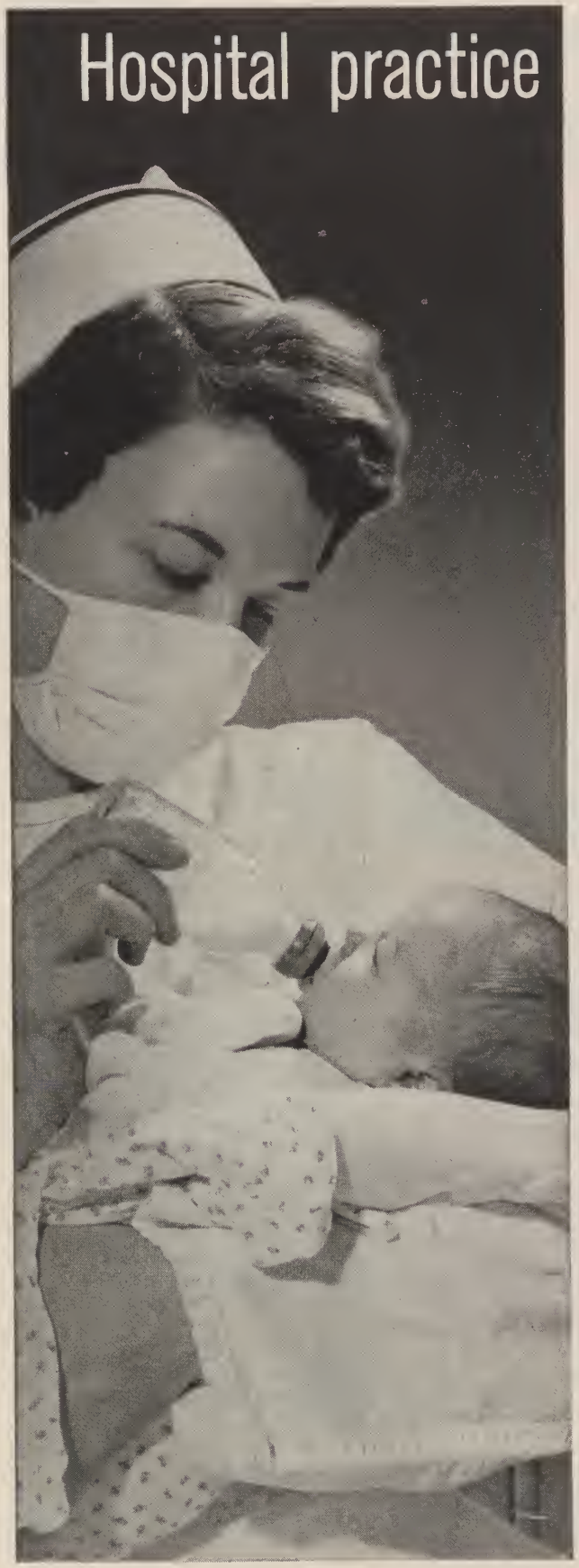
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Hospital practice of infant feeding

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The total daily feeding usually amounts to 2 ounces of milk *per pound of body weight*, plus 1 ounce of Karo Syrup with enough water to satisfy fluid requirements.

The newborn usually takes from 2 to 3 ounces of formula per feeding; the very young infant, 4 to 5 ounces—the daily quota yielding over 50 calories for each pound the infant weighs. The quantity per feeding should not exceed 8 ounces.

Newborns are fed at 3 to 4 hour intervals throughout the 24-hour period—the 2 or 3 A.M. feeding is discontinued after the neonatal period. In the third or fourth month the 10 or 12 P.M. feeding is discontinued, once the infant fails to awaken for the bottle. Standard but individualized formulas which constitute the hospital infant feeding regimen are shown here.

WHOLE MILK FORMULAS

Age Months	Cow's Milk Fluid Oz.	Water Oz.	KARO Tbsp.	Each Feeding Oz.	Feedings In 24 Hrs.	Total Calories
Birth	10	10	2	3	6	320
1	12	13	2½	4	6	390
2	15	13	3	4½	6	480
3	17	9	3	5	5	520
4	20	11	3½	6	5	610
5	23	11	4	6½	5	700
6	26	10	4	7	5	760

EVAPORATED MILK FORMULAS

Age Months	Evap. Milk Fluid Oz.	Water Oz.	KARO Tbsp.	Each Feeding Oz.	Feedings In 24 Hrs.	Total Calories
Birth	6	12	2	3	6	380
1	8	16	3	4	6	532
2	9	14	3	4½	5	576
3	10	15	3½	5	5	650
4	12	18	4	6	5	768
5	12	21	4	6½	5	768
6	13	22	4	7	5	768

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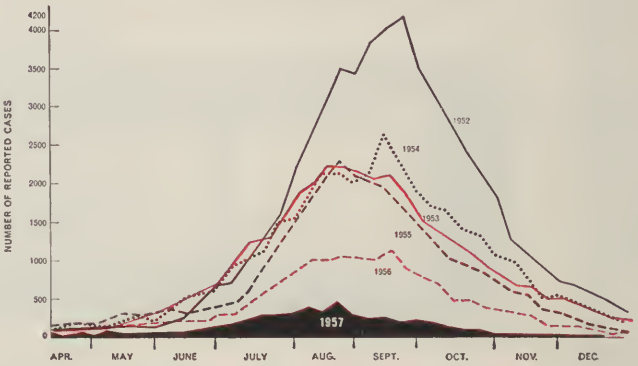
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At the last accounting,[1] physicians throughout the country had administered at least one dose of poliomyelitis vaccine to 64 million Americans—all three doses to an estimated 34 million. Undoubtedly, these inoculations have played a major part in the dramatic reduction of paralytic poliomyelitis in this country.



Incidence of polio in the United States, 1952-1957
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There are still more than 45 million Americans under forty who have received no vaccine at all and many more who have taken only one or two doses.

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1. *J. A. M. A.*, 165:21 (*November 23*), *1957.*
2. *Department of Health, Education, and Welfare: News Release, October 10, 1957.*

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The JOURNAL of the
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ISSUED MONTHLY UNDER THE DIRECTION OF THE COUNCIL

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Surgical Therapy of Gallbladder Disease*

HENRY S. COLLIER, M.D., AND R. ARNOLD GRISWOLD, M.D.
Louisville, Ky.

Introduction

THE treatment of biliary tract diseases is a frequent problem to the family physician, the internist and the general surgeon. With an increasing proportion of our population becoming elderly, and female, biliary tract diseases and the surgical treatment of these should continue to increase. Cholecystectomy is now the second most frequent abdominal operation and may become the most frequent.

Any discussion of surgical treatment of gallbladder diseases must primarily start with a consideration of the occurrence of gallstones. It has been estimated that 25% of the population over 50 will have stones, and for females above 50 this has been set as high as 40%. Acute and chronic cholecystitis without associated stones is infrequent. Studies have shown that the longer gallstones are retained the higher is the incidence of associated common duct stones. If treatment is further delayed, changes occur in the bile duct system and liver, with biliary cirrhosis resulting from recurrent bouts of cholangitis.

The following presentation is an analysis of our cases in private practice over a period of 5 years, from July, 1952 to July, 1957. These cases were treated in the same hospital with usually the same operating team and with a rather constant preoperative and postoperative management.

Material

This series consists of 178 patients, and includes all cases operated upon by us at Norton Memorial Infirmary in Louisville for the diagnoses of acute or chronic cholecystitis, common duct obstruction by stone, spasm, or stricture, and carcinoma of the gallbladder. All diagnoses were made from pathologic specimens removed.

The distribution of the ages by decades is shown in Figure 1. The youngest patient was 19 years old, the oldest 84 years. Patients over 60 years old made up 26.4% of the series and 75% of deaths.

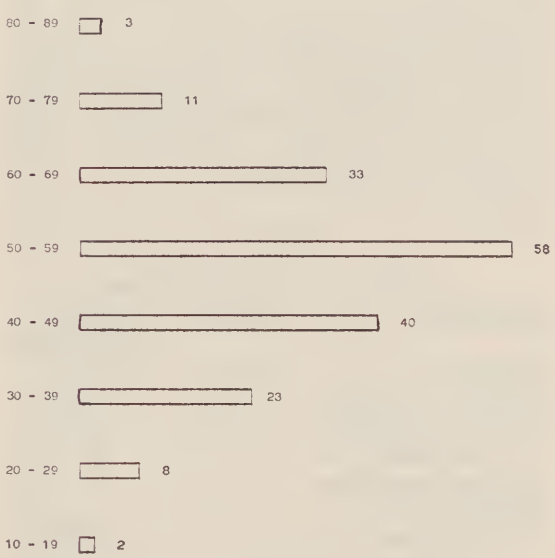


Figure 1

Age distribution by decades. Most cases were in the 5th, 6th, and 7th decades.

Females made up 72% of patients, with an average age of 50 years. Males comprised 28% of the series, with an average age of 54.9 years. The average age of both sexes was 51 years. (Table 1)

Cholelithiasis was present in 93% of all cases, and choledocholithiasis in 10.1%. The diagnosis of chronic cholecystitis was made in

*Presented before the Kentucky Chapter, American College of Surgeons, at the KSMA annual meeting on September 18, 1957.

TABLE I

Total Cases

178 Patients

			AVERAGE AGE
FEMALE	128	72%	50.0
MALE	50	28%	54.9
TOTAL	178		51.0

72.6% of the series, and acute or subacute cholecystitis was present in 26%. Four patients had carcinoma of the gallbladder (2.25% of the cases). One case of carcinoma, in a young postpartum female, fortunately was early and it is felt that cholecystectomy has resulted in a cure. (Table 2)

Four patients had perforation of the gallbladder at the time of operation. Two of these were diagnosed as perforated appendix preoperatively. All patients with perforation recovered uneventfully. Fifteen percent had had previous surgery on the biliary tract, consisting of cholecystectomy in 11 and cholecystostomy in 4 patients. Secondary operations performed were cholecystectomies, excision of large cystic duct remnants, removal of common duct stones, plastic repair of stricture of common duct, and transduodenal sphincterotomies. Other associated diseases diagnosed were cholesterosis, cirrhosis, papilloma of gallbladder, chronic duodenal ulcer, gallbladder-duodenal fistula, pancreatitis, coronary insufficiency, ventral hernia, and hiatus hernia.

TABLE II

Diagnoses of Total Series

DIAGNOSIS	TOTAL	PERCENT TOTAL CASES
Gallstones	154	93%
Chronic Cholecystitis	122	72.6%
Acute Cholecystitis (Subacute)	43	26%
Common Duct Stones	18	10.1%
Carcinoma of Gallbladder	4	2.25%

Treatment and Results

Acute Cholecystitis: Forty-three patients were diagnosed as having acute or subacute cholecystitis. Seventy percent of these patients were over 50 years old. There were 2 deaths for a mortality rate of 4.65%. Both these patients were above 65 years of age.

Sixty percent of these patients gave a history of previous attacks and known gallbladder disease for a number of years. Pain was severe and present in 98% of this group. It was a frequent observation that the postoperative discomfort was less severe than the pain resulting from the acute inflammation. The pain was described as having a typical character of radiation to the subscapular or right shoulder regions in 50%. Nausea and vomiting accompanied an attack in 78%.

Ninety percent had physical findings of right upper quadrant tenderness. A mass was palpable in 22%. Jaundice was clinically evident in 10%. Sixty percent had a white cell count of over 10,000, with 21,000 being the highest count.

Ninety-eight percent of the gallbladders infected had stones. Thirty percent of these stones were impacted in the cystic duct, and 10% had common duct stones. Only in 2% of cases were stones absent.

Table 3 shows the operative procedures. Forty-three patients had 45 operations. Cholecystectomy was done in 88.4% at the initial procedure or in 93% as completed treatment.

TABLE III

Operative Procedures for Acute Cholecystitis

43 PATIENTS

45 OPERATIONS

PROCEDURE	TOTAL		PERCENT
Cholecystectomy	40		93%
Initial	38	(88.4%)	
Delayed	2	(4.6%)	
Cholecystostomy	5		12%
Exploration of Common Duct	13		30%
Percent Positive			30%

In 12% cholecystostomy was elected as the safer early procedure. Thirty percent of cases had also exploration of the common bile duct, and in those explored, 30% of the cases had stones present.

As previously stated, 2 patients died, with a mortality rate of 4.65%. Both patients were elderly, death in one, an 84-year-old male, was secondary to complications of evisceration on the 7th postoperative day. He had marked liver damage present, preoperatively, as a result of common duct stones. The other patient died 6 weeks after surgery, from a severe postoperative pancreatitis. She also had exploration of the common duct.

Chronic Cholecystitis and Cholelithiasis: One hundred and twenty-three patients were diagnosed as having chronic cholecystitis and in 96% gallstones were present. Fifty-two percent of these patients were above 50 years old.

One death occurred for a mortality rate of 0.8%. There were no deaths in patients over 60 years old.

Ninety-three and eight tenths percent of this group gave a history of having had painful episodes, but tenderness was elicited on physical examination in only 54% in contrast to 90% in the acute group. Radiation of pain to the typical posterior region was present in 70%. There was less evidence of nausea or vomiting. Fifty-eight percent of these patients gave a history of some type of food idiosyncrasy precipitating attacks.

X-ray examination was most helpful in confirming or establishing the diagnosis. Stones were revealed in seventy-six and seven-tenths percent. There was failure of visualization in 20% and these were diagnosed as having a nonfunctioning gallbladder.

Cholecystectomy was performed in 99.8% of this group. The common bile duct was explored in 21%. Stones were found in 31% of those explored. Additional operative procedures are listed in table 4.

One patient, who had severe cirrhosis plus gallstones, developed posterior cerebral thrombosis and died after liver biopsy and cholecystectomy were done.

TABLE IV

Operative Procedures for Chronic Cholecystitis

PROCEDURE	TOTAL	PERCENT
Cholecystectomy	122	99.2%
Cholecystostomy	1	0.8%
Exploration of Common Duct	26	21%
Percent Positive		31%
ADDITIONAL PROCEDURES		
Appendectomy	10	
Liver Biopsy	8	
Cholangiogram	3	
Ventral Hernia Repair	2	
Vagotomy—Gastroenterostomy	2	
Hiatus Hernia Repair	1	
Closure Duodenal Fistula	1	
Hysterectomy	1	

Common Duct Stones and Obstruction: Choledochostomy was carried out in 48 patients, or 27% of those operated upon. The procedure was most frequently combined with cholecystectomy, but in 10 patients the operation followed previous surgery of the biliary tract. In 24 patients, or 50% of those explored, the findings were positive, i.e., stone, sphincter spasm, or stricture were present. This made 13.5% of the entire group having some form of common duct involvement. (Table 5)

TABLE V

Common Duct Exploration
TOTAL SERIES—178 PATIENTS

			PERCENT OF TOTAL
Common Duct Explored	48		27%
Negative	24	50%	13.5%
Positive	24	50%	13.5%
DIAGNOSIS	**TOTAL**	**PERCENT**	
Stones	18	37.5%	
Spasm Sphincter	5	10.5%	
Stricture	3	6%	
Retained Stone	2	4%	

In 2 patients out of the 48, stones in the biliary tract were overlooked. One patient had a large stone in the proximal portion of a left hepatic radical with a narrowing of the duct radical distal to the stone. This was missed on an operative cholangiogram, but it would have been impossible to remove this without resecting a major portion of the left lobe. The other patient had been operated upon for partial obstruction and sphincter spasm was found. Postoperative cholangiogram revealed a small stone retained. After waiting a considerable time to allow spontaneous passage, re-exploration was done. A small stone was removed, and this was followed by uneventful recovery. Both patients had been previously operated upon for biliary tract stones.

Pain with radiation to the back, nausea and vomiting, and history of jaudice and acholic stools were the most frequent subjective symptoms. Pain was present in 100% of the patients with positive findings. Seventy-one percent of these had radiation to the back, and in 75% the pain was followed by nausea or vomiting. Forty-two percent gave a history of jaundice. Clinical jaundice was evident in 37.5% of the positive group with 50% having some elevation of bilirubin. Eighty percent of this group had some degree of tenderness.

All patients had a negative postoperative cholangiogram prior to removal of the T-tube. The time of removal of the tube was determined by the ability of the patient to tolerate clamping off of the tube for over 48 hours. The average postoperative hospital stay for this group was 15.6 days as compared with 10.4 days for the entire series and 8.35 days for patients having cholecystectomy alone.

There were 3 deaths in 48 patients explored for a mortality rate of 6.25%. There were no deaths under the age of 65 years. Two of the deaths in this group are also reported in the group with acute cholecystitis.

Carcinoma of the Gallbladder: There were 4 cases of carcinoma in 178 patients, an incidence of 2.25%—3 were females and 1 male. In this small group only 1 patient was over 65, and, in fact, 2 patients were below 50 years old. The youngest patient seems to have been cured by cholecystectomy. One patient did not have stones. Two did have stones. In the other patient it was impossible to determine the presence of stones at laparotomy. Two patients were transferred to a large center for radical surgery. One of these died as a result of surgery; the other is 5 months postoperative without evidence of recurrence.

Surgical Technique

There were 162 cholecystectomies, 6 cholecystostomies, and 48 choledochostomies done in 178 patients. The majority of cases were done through an oblique incision. The gallbladder was most often removed from below-upward, and most cases were drained. There was 1 evisceration, 3 hematomas, 2 mild wound infections, and no postoperative hernia in this group.

The following is a description of the operative technique most often used. The incision is placed obliquely over the right upper quadrant and is essentially the abdominal portion of the thoraco-abdominal incision. It begins over the costal margin in the 7th or 8th interspace and extends obliquely and inferiorly across the right upper quadrant toward the left lower quadrant. The incision crosses the midline about 2 inches above the umbilicus and ends about 2 inches to the left of the midline. The fascia and rectus muscle are divided in line with the skin incision. The left rectus muscle is usually retracted, and the posterior sheath and peritoneum opened beneath it to under the costal cage. If further length is desired, the left rectus is divided, and the incision may be extended to the left or downward. After placing a self-retaining retractor, a diamond shaped opening is obtained with the widest portion of the opening immediately below the costal margin. The gallbladder is emptied with a trochar connected to suction, if it is tense and edematous; otherwise, the fundus and infundibular portions of the gallbladder are grasped with curved hemostats for upward traction. The abdominal contents inferior, medial and lateral to the gallbladder are packed off, and the assistant retracts these structures with his left hand.

The peritoneal and areolar coverings over the cystic duct and artery, the common bile duct, and the common hepatic duct are carefully incised and displaced for adequate visualization of all of these structures. A right angle clamp is passed beneath the cystic duct, a ligature placed in the clamps, and the cystic duct is ligated in continuity about 0.5 cm. from the common bile duct before dividing the cystic duct. The artery is ligated and divided by the same maneuver, and the gallbladder is removed from its bed in the liver. Any bleeding from the liver bed is treated by coagulation.

If the common duct is to be explored, the cystic duct is occluded, and the common duct exploration done before removal of the gallbladder. Careful thoroughness is the method to be used in exploring the common duct. The duct is closed over a T-tube which is brought out through a separate opening from the drain. The incision is closed in layers with interrupted silk sutures.

Discussion

Statistics are of value only in reviewing what has occurred in the past. They are never meant to be a recipe for the treatment of present or future cases. To say that each case must be individualized is a much used but remarkably true philosophical statement. However, some generalizations can be made from study of past events. One of the important lessons to be gleaned from this series would seem to be that emergency surgery of the biliary tract is risky business in the elderly patient, and every sur-

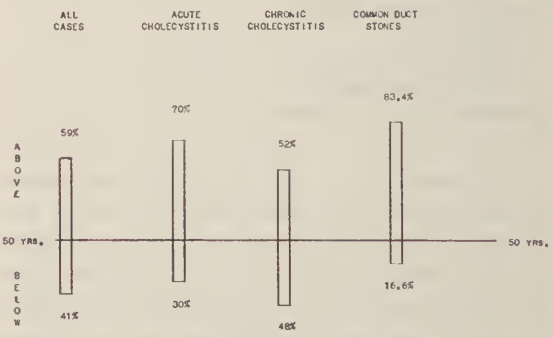


Figure 2

Age distribution by diagnoses using age of 50 years as dividing line

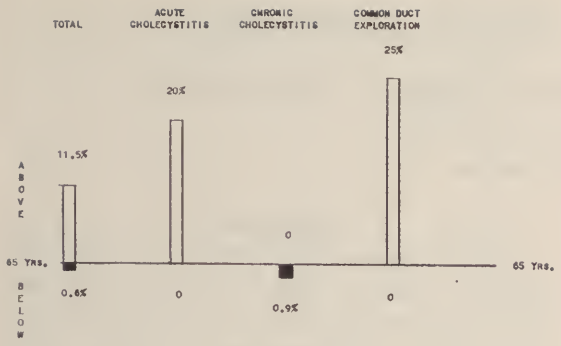


Figure 3

Mortality rate/age distribution

geon should push for the interval cholecystectomy of the so-called "silent" gallstone, if there are no other contraindications. Figures 2 and 3 seem to prove this statement. Figure 2 shows the age distribution by diagnosis and figure 3 shows the mortality rate by diagnosis of patients above and below 65 years old. In figure 2 it will be noticed that although 59% of patients were above 50 years old, 70% and 83.4% respectively of cases with acute cholecystitis and common duct stones were in this group, showing that a high percentage of the more serious surgical problems were presented when the patient was a poorer surgical risk. Figure 3 shows this even more conclusively when the age of 65 is taken as a dividing line. The mortality rate above 65 was 11.5% against 0.6% below. But the elderly patient was as good a risk for elective surgery under ideal conditions as the younger patient, the mortality being no deaths above 65 and 1 death below 65. However, when common duct exploration became necessary it was an entirely different story. The majority of patients with common duct stones were above 50 years of age, and all deaths occurred in those above 65—a mortality rate of 1 death out of 4 patients operated upon.

The elderly patient as an acute biliary surgical problem is a poor risk, and if non-operative conservative means will not tide him over until the interval stage then the easiest and safest procedure possible should be done.

Summary and Conclusions

1. Studies of biliary tract diseases and the surgical treatment of them in 178 patients over a period of five years have been presented.

2. Total mortality for all cases was four deaths or 2.25%. Mortality for *elective* surgery was 0.6%.

3. Most of the cases of acute cholecystitis and common duct obstruction occurred in elderly patients.

4. The elderly patient was as good a surgical risk as the younger patient when operated upon in the absence of recent severe complications.

5. Severe complications in the elderly patient should be treated by conservative and non-operative measures if possible—surgical therapy should usually follow as an elective procedure, unless other contraindications are present.

6. The surgical cure for carcinoma of the gallbladder is removal of the so-called "silent gallbladder" containing stones.

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Vitreous Implant In Retinal Detachment; A Study of 50 Consecutive Vitreous Operations*

Donald M. Shafer, M.D.
New York, N. Y.

THE beneficial use of vitreous has produced very little medical literature, but there are many pages of print warning the ophthalmologist of its problems or the troubles it can produce. To propose its use in the treatment of retinal detachment, therefore, makes it the same for the author as for the surgeon—a very sticky subject. However, human vitreous has been planted in complicated retinal detachment cases for several years. In fact, the first successful case was operated on at Manhattan Eye, Ear and Throat Hospital in June 1949—almost 7 years ago—and that retina is still attached.

Definitions

The planting of human vitreous in eyes as described in this paper is called a vitreous implant, because no vitreous is withdrawn from the patient's eye, but new sterile human vitreous is injected. This is not to be confused with vitreous transplants or replacements such as are used for massive hemorrhages, and which entail withdrawal of the bloody vitreous, then its replacement by donor vitreous. The vitreous implant has been used in conditions other than retinal detachment, but this paper will be confined to the problem of such detachments.

A second definition concerns that of the term "vitreous." The vitreous used in this presentation is actually vitreous aspirate, that material which can be aspirated from a human donor eye by the suction of a syringe through an 18 gauge needle. It is a clear, transparent, oily fluid. It is not jelly-like, possibly fortunately so, as will be discussed under the rationale of the procedure.

The final definition pertains to "donor eye." A donor eye is an enucleated human eye received at the Eye Bank for Sight Restoration, usually, but not always, from a deceased person. The vitreous is aspirated 6 to 48 hours after enucleation from those eyes which had corneas unsuitable for corneal transplantation. Donor eyes with neoplasm, intraocular infection or with positive serology, were not used.

Rationale

The rationale of using vitreous in retinal detachment seemed logical on three different bases. A fourth factor became clinically apparent after a number of cases had been operated on.

First, the anatomic basis. As we all know, the retina is attached at two points only; posteriorly at the optic nerve and anteriorly as a ring, at the ora serrata. Between these two extremes there are only the nebulous prolongations of the pigmented cell layer. Thus the retina extends from front to back in an arc with no proven means of support. It was felt that this support might well come from the vitreous. Therefore, any loss of vitreous volume, such as from direct loss in cataract surgery, which we know predisposes to detachment, or indirectly, such as subretinal fluid drainage, could lessen the support. Conversely, the replenishment of vitreous volume seemed indicated to renew the support for the retina.

Second, the physical basis for the use of vitreous. It was felt that a logical cause of retinal detachment was the pull on the retina by the attachments of the vitreous body and consequent hole formation, as proposed by Lindner, Teng, Wadsworth and others. If so, then the more surge of the vitreous, the more traction on the vitreous attachments. Since many retinal detachments are thought to be preceded by a detachment of the vitreous so that a highly viscous mass is surrounded by a less viscous fluid, the vitreous mass can surge freely. Therefore the introduction of a viscous material should reduce the surge of the patient's own vitreous and consequently reduce the likelihood of subsequent detachment. Vitreous aspirate was a logical candidate to form this viscous environment, because it most nearly equalled the viscosity of the recipient's vitreous.

Third, the surgical basis. This is a simple matter of increasing pressure by injecting air or saline. It is effective only at the time of the injection, and consists of pushing the retina back against the choroid by the mere use of pressure within the envelope of the retina. The

*Presented before the Kentucky Eye, Ear, Nose and Throat Society at the KSMA annual meeting on September 18, 1957.

only advantage of vitreous over air or saline is that I believe vitreous is retained to maintain the volume of the vitreous for a long time. On the other hand we know air is absorbed in a few days and I believe saline is too.

The fourth basis for the use of vitreous was learned by experience. It was found that fixed retinal folds and vitreous bands were frequently gone after a vitreous implant. Several cases with vitreous bands under obvious tension showed no evidence of the bands a week or two postoperatively. Some of these cases failed to reattach with the first vitreous implant, then with the bands gone, reattached after a subsequent implant. The same thing happened with fixed retinal folds. The implanted vitreous has a definitely beneficial effect on the retina whether or not reattachment occurs.

Technique

Vitreous implantation is best performed with the patient under general anesthesia. Intravenous sodium Pentathol® was used in all the cases in this series.

After reflection of the conjunctiva and tenons capsule temporally, an incision through the sclera is made at right angles to the limbus. The incision should be 4 millimeters long with its center 9 millimeters from the limbus. In this position there is no entry through the retina but instead in the posterior portion of the pars plana away from the ciliary body and the lens, if present. Two mattress sutures are placed edge to edge through the scleral lips of the incision. The two sutures oppose each other. In other words, the typing arms of one mattress suture come from each lip of the incision so that each suture can be tied against the counter-pull of the other. Size 5-0 monofilament nylon suture material has been found best as the knot slips easily and does not cut itself readily, as does silk and catgut. Good small needles are a great help in tough sclera.

After the vitreous sclerotomy and after the sutures are placed, the diathermy to seal the tears is performed. I use nonperforating intrascleral diathermy under direct view to be sure the tear is isolated.

Then the subretinal fluid is drained. I prefer a scratch through incision of the sclera and open the choroidal bleb with diathermy. After drainage is complete, using suction if necessary, the donor vitreous is planted.

Returning to the sclerotomy 9 millimeters from the limbus, the choroid (pars plana) is opened with diathermy to avoid bleeding. The nylon sutures are made ready and held by an assistant while an 18 gauge needle attached to a syringe containing 4 c.c. of donor vitreous is inserted. The needle is readily seen through the pupil and vitreous is inected until the globe becomes quite firm (estimated 50 Schiotz) and held so for 2 minutes. The pressure is then permitted to fall to approximately 30 Schiotz and the nylon sutures are pulled snug and the needle withdrawn. The sutures are tied and a ring of diathermy is placed around the sclerotomy. Any reflected muscles are reattached and the conjunctiva is closed.

The post-operative handling is the same as for any diathermy case.

Results

TABLE I

Preoperative Status of Cases Before Vitreous Implant

(50 Consecutive Operations)

Saline Implant plus Diathermy Failure	3
Scleral Resection or other Scleral Surgery Failures	11
3 or more previous Diathermy or Scleral Surgery Failures	14
Aphakic Detachments	22
Total Detachments	26
Retrolental Fibroplasia	2
Fixed Vitreous Bands	11

(Most eyes had more than one complication)

TABLE II

Results of Vitreous Implant Compared to Complicating Factor

Number		% Reattached
22	Aphakic Detachments	31%
26	Total Detachments	35%
18	Myopia - 5.00 diopters or less	50%
3	more than 5.00 diopters	0%
11	Fixed Vitreous Bands	36%
All Detachments (50) - All Previous Failures		42%

TABLE III

Overall Results of Vitreous Implant for Retinal Detachment

(50 Consecutive Operations)

44 Complicated Detachments 48% Reattached
50 Vitreous Implants 42% Successful

STANDARD OF SUCCESS — All the available retina reattached for 6 months or longer.

Note: One case had three vitreous implants, four others had two each.

TABLE IV

Visual Results of 21 Successful Vitreous Implants From 50 Complicated Detachments

20/30 or better	6
20/40 to 20/70	6
20/80 to 20/200	6
Worse than 20/200	3
	21

Comment

It must be emphasized that the cases presented were consecutive and all were previous failures by other techniques. There is no selection of cases and many of them were truly "hopeless," particularly in the early phases of the work when the outcome or possible complications were not known.

The complications have been surprisingly few. There was no panophthalmitis or endophthalmitis. There have been no major hemorrhages in this series with this technique, though that has occurred when the vitreous implant was combined with a scleral resection. Glaucoma, readily controlled by pilocarpine, has occurred in one case. In this case the patient has glaucoma in the eye not operated on.

Three successful cases have slowly developed cataracts in the treated eye, but only after more than two years, and in one of them there is equal development in the other eye.

Several of the failures have slowly developed early phthisis but no more rapidly than is usual in old detachment cases.

In many cases the improvement of the appearance of the retina, and the reduction or absence of folds and vitreous bands, is so great that the procedure appears to have a long term therapeutic value over and above the problem of reattachment alone. The bands frequently appear to rehydrolyze in the donor vitreous, just how is uncertain. This, coupled with the fact that new bands have rarely formed and never in a successful reattachment, even up to 6 years postoperatively, has been remarkable. Thus far no vitreous implant eye has been lost.

Summary

1. The rationale and technique for implanting human vitreous in retinal detachment cases is presented.

2. The procedure resulted in the reattachment of the retina in 48% of the eyes, all previous failures by the usual surgical techniques.

3. A discussion of the results and complications is presented.

CONTRIBUTING CAUSES OF ANGINA

ALLEN L. CORNISH, M.D.

Lexington, Ky.

THE most rewarding, yet the most difficult part of the treatment of angina pectoris, is the prevention of attacks. Prevention of the attacks will not only spare the patient pain and disability, but may also prevent the disaster of sudden death inherent in anginal paroxysms.

Of course, the patient is urged to keep his activities below the "threshold of angina." He also is advised to take nitroglycerine prophylactically before he undertakes necessary activities that might produce pain.

The importance of extracardiac contributing factors in the anginal syndrome has not, in my opinion, been sufficiently stressed. Standard texts dismiss such factors with a paragraph or two.

I have found that often the elimination of such contributing factors has been most useful in ameliorating symptoms and reducing the frequency of attacks, even though the basic cardiac pathology could not be directly improved.

Recently I have reviewed the experience of the Lexington Clinic. Of 628 patients with arteriosclerotic or hypertensive heart disease seen from 1951 to 1956, over one-third, or 238, were classified as having angina. All of these 238 patients had symptoms of chest pain on exertion that was relieved by rest and nitroglycerine and was accompanied by electrocardiographic changes at rest or after the standard exercise test.

The average age of the 238 patients when first seen was 57.3 years; 62 (26%) were female and 176 (74%) male.

Significant contributing factors were found in 113, or 48.3%, of these patients with angina. Only if elimination of the contributing factor was followed by reduction in the number of attacks by at least 50%, was the patient classified as "improved" for the purposes of our study.

TABLE I

Contributing Causes of Angina

	Found	Improved	Unimproved	Lost to follow-up
1. Congestive heart failure	61	44	8	9
2. Obesity	9	7	0	2
3. Severe hypertension	12	6	0	6
4. Arrhythmias	2	2	0	0
5. Anemia	3	2	0	1
6. Thyrotoxicosis	2	2	0	0
7. Diabetes	3	0	3	0
8. Pulmonary disease	4	0	4	0

Congestive Heart Failure

Symptoms and signs of congestive heart failure were found in 61 cases, or 25.7%, of the total series. Forty-four found distinct benefit following active, vigorous treatment of the congestive failure. Treatment included digitalization, salt restriction, and diuretics.

At times the picture of failure was overt, at times almost subclinical. An example of the latter was a 47-year-old white male with severe anginal pain on the slightest exertion. He also suffered from angina decubitus to the extent that for three months he had hardly gone through a night without pain. On examination the heart was enlarged but the lung fields were clear, and there was no edema, hepatomegaly, or other clinical evidence of failure. However, salt restriction, digitalization, and mercurial diuresis produced an immediate 10 lb. weight loss. His nocturnal pain ceased and his exercise tolerance moderately increased. Continued attention to the failure resulted in continued freedom from nocturnal attacks and his being able to return to light work.

Obesity

Marked obesity was noted in nine cases (3.8%). Seven were greatly improved by weight loss of at least 20 pounds. Two were lost to follow-up.

Hypertension

Vigorous measures to reduce a greatly elevated blood pressure were employed in 12 cases (4.7%). Half of these received marked benefit. For example—a 47-year-old white male complained of dyspnea and pain on moderate exertion. The blood pressure was 244 systolic and 160 diastolic. With antihypertensive measures, including sympathectomy, his dyspnea almost entirely disappeared and the anginal pain became most infrequent. When last seen on October 12, 1956 his blood pressure was 142 systolic and 84 diastolic.

Paroxysmal Tachycardia

In two cases (.85%) the anginal pains were found to be coincident with bouts of paroxysmal tachycardia; one patient had paroxysmal atrial fibrillation and the other paroxysmal atrial tachycardia. In each case the pain disappeared after further bouts had been prevented by continuous digitalis administration.

Anemia

Three patients were severely anemic (1.2%). One had pernicious anemia. Angina ceased following adequate therapy with vitamin B-12. A second had an hypoplastic anemia and the angina was relieved by whole blood transfusions. A third patient was lost to follow-up.

Thyrotoxicosis

Two patients (0.85%) were found to have thyrotoxicosis. Prompt relief of the angina followed successful treatment of the thyroid condition.

Diabetes

In three (1.2%) patients diabetes was discovered. Control of the diabetes did not result in any apparent decrease of the severity or frequency of the anginal pain.

Pulmonary Disease

Associated severe pulmonary disease was present in four cases (1.7%). There was one carcinoma of lung, one patient with severe asthma, another with marked pulmonary emphysema, and a fourth with extensive bronchiectasis. No discernible improvement in the angina could be seen following appropriate treatment directed at the pulmonary diseases.

TABLE II

Contributing Causes of Angina

	Found	Improved	Unimproved	Lost to follow-up
9. Gallbladder disease	8	4	3	1
10. Duodenal ulcer	4	1	0	3
11. Hiatus hernia	2	1	0	1
12. Diverticulitis coli	2	0	1	1
13. Abdominal carcinomatosis	1	0	1	0

Abdominal Disease

Significant intra-abdominal pathology was found in 17 instances (7.1%). A possible connection between reflexes arising in the gastrointestinal or biliary tract and angina is suggested by the fact that eructation, or the passage of flatus, frequently precedes the abatement of an anginal paroxysm. Experimentally, distention of the stomach with balloons has been shown to decrease the coronary blood flow. This effect was abolished by section of the vagi[1]. Ravdin produced anginal pain and electrocardiographic changes in patients with coronary disease by mechanical distention of the common bile duct[2]. Experimentally this can occur only with the vagus nerves intact[3].

Eight patients (3.4%) were found to have associated gallstone disease. Cholecystectomy was done in seven cases: four were markedly improved after operation, one died of a myocardial infarct 3 months postoperatively and two write that they are unimproved.

As Ravdin has shown, at times the improvement in angina following cholecystectomy can be dramatic[2]. We have observed one 80-year-old white male who, because of severe angina, was for more than a year confined to one or two rooms of his house. Any exertion beyond walking a few feet was stopped by severe substernal pain. He also had attacks of gallstone colic. He finally consented to a cholecystectomy in March, 1956 and now is able to walk a mile without pain.

Duodenal Ulcer

In four cases (1.9%), associated duodenal ulcers were demonstrated. One patient found that appropriate ulcer treatment significantly decreased the frequency, though not the severity, of his anginal attacks. The remaining three have been lost to follow-up.

Hiatus Hernia

Hiatus hernias were found in two instances (0.85%). One of the two was improved by dietary and other measures; the second was lost to follow-up.

Diverticulitis Coli

Diverticulitis coli appeared twice. Treatment of this condition was not followed by improvement in one patient. The other patient was lost to follow-up.

Abdominal Carcinomatosis

One patient had associated diffuse abdominal carcinomatosis. Therapy was symptomatic only and the angina was unrelieved.

TABLE III

Contributing Causes of Angina

Total patients	238	
Other pathology found	113	(48%)
At least 50% improvement	69	(29%)
No improvement	19	(8%)
Lost to follow-up	25	(11%)

Summary and Conclusions

In a series of 238 patients with angina pectoris, other significant associated pathology was present in 113, or 48.3%. Sixty-nine (29%) patients found at least a 50% diminution of the frequency of their pain following successful treatment of the associated pathology. Nineteen patients (8%) were not improved. Twenty-five (11%) were lost to follow-up.

The results of this study indicate that all patients having angina pectoris deserve thorough investigation of extracardiac factors that might be contributing to the frequency and severity of their attacks. Frequently one or more such factors can be found and corrected, and the patient's clinical condition improved even though the fundamental abnormalities in the coronary arteries are unaffected. Congestive heart failure, obesity, hypertension, and gallstone disease have been the most frequent of such contributing factors.

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KSMA ANNUAL MEETING

September 23, 24, and 25

The Fractured Sternum and Alternative Plans for Stabilization With Special Reference to Internal Fixation*

JOHN B. FLOYD, JR., M.D.
Lexington, Ky.

FRACTURES of the sternum have been treated satisfactorily in many ways. Trauma, usually from an automobile accident, is the primary cause of these fractures. They are widely known as steering wheel injuries because of the means by which the force is transferred to the chest. The widespread use of seat belts, as advocated by Griswold, would aid in preventing this injury.[1] Though the majority of chest injuries seen in civilian practice are sustained in automobile accidents, an increasing number are due to air travel, use of farm machinery and industrial accidents.[2] These lesions quite commonly are treated by the general surgeon as part of the management of the associated injuries.

Incidence

Ellis,[3] blaming the increasing incidence of fractures of the sternum on the increasing use of the automobile, quoted previous authors as follows to support this thesis:

Author	Year	Cases	Total Fractures	Per Cent
Gurlt	1864	22	22,616	0.098
Speed	1916	12	11,302	0.1
Burns	1928			0.2
Chadowsky	1928			0.3
Plagmann	1928			0.35

Braunstein[4] reported on 1,000 accidents collected by the Automotive Crash Injury Research Project found that 36.6% of 1,678 injured had injuries to the thorax and thoracic spine. Fractured sternum was found in 0.2% of the injured and in 2.2% of the thoracic injuries. He stated that there is no evidence that seat belts will increase the incidence of abdominal and pelvic injuries.

Kaye and Meade,[5] 1946, analyzing 500 consecutive patients with war injuries of the chest, noted that four fractures of the sternum, an incidence of 0.8%, were recorded.

Rappart, Allen and Curry[6] reviewed a series of 490 patients injured with fractured ribs severe enough for them to be admitted to Hurley Hospital in the six years, 1947-1952. Fifteen of these patients had a fractured sternum, an incidence of 3.06%.

The multiple associated injuries of trauma with few exceptions, do not require the detailed emergency care entailed by crushing injuries of the chest. The vital organs of respiration and circulation are protected by the bony thorax and yet may be injured by mild trauma. Disruption of the bony cage requires a considerable force capable of producing pulmonary and cardiac contusion with a decrease in body oxygenation. These non-penetrating injuries to the chest, when severe, usually involve fractures be dealt with other than to mention that the problem of bleeding from vessels or heart in- of the chest wall. Penetrating injuries will not jury and sucking defects in the chest wall, must be corrected quickly.[7] Kinsella emphasized the fundamental principles of treatment as being the control of hemorrhage, the treatment of shock, and the restoration of cardio-respiratory physiology to normal as rapidly as possible.[8]

General Care

The general care of a patient with a fractured sternum, with or without broken ribs, begins on the stretcher when first seen. Joplin points out that simple fractured sternums are of no particular importance unless the extent of damage permits interference with heart or lung function.[9]

Nasal oxygen administration and intercostal anesthetic nerve blocks can be prepared while an examination of the patient on the stretcher is progressing to determine other injuries. If the patient is in acute respiratory distress and signs of a tension pneumothorax are present, immediate relief may result from decompression with a needle inserted in the second intercostal space in the mid-clavicular line.

Naso-pharyngeal suction and good tracheal toilet will aid in maintaining an adequate air way. Inadequate respiratory function due to paradoxical motion can be controlled by splinting or traction of the chest wall and alleviated by a tracheostomy.[10, 11] Positive pressure administration of oxygen may suffice for a short time.

*Presented at the meeting of the Kentucky Chapter, American College of Chest Physicians during the 1957 Annual Meeting on September 18.

The sternum is composed of highly vascular cancellous tissue, covered by a thin layer of compact bone. The compact bone layers known as the outer and inner tables are thickest in the manubrium between the clavicles. The sternum is enclosed in a sheath formed by the chondro-sternal ligaments.[3] These ligaments bind it securely to the clavicle and ribs, especially in the upper portion. In addition, the manubrium is fused to the first rib. This provides for stronger stabilization of the upper sternum in relation to the body or lower portion because the other chondro-sternal articulations feature joint spaces. This situation would then lead us to feel that fracture through the body is of greater frequency than through the manubrium, especially below the second intercostal space.

In fact, it is likely that fractures of the body of the sternum are more common than is suspected. Because of the limiting sheath formed by the ligaments, certain minimal forces might fracture the bone without shearing through the sheath. This type of fracture is difficult to demonstrate by x-rays, and no disability follows other than for the presence of local pain. Thus, a sufficient force is required to break not only the bone, but to tear through the sheath in order to create mobility of fragments with the overriding and pain necessary to produce disability of the patient.

Diagnosis

Uncomplicated fractures of the sternum result in a characteristic position to be assumed by the injured person. The patient is unable to find a comfortable position in bed. Coughing and sneezing refers pain to the sternal area. Ellis points out that if overriding occurs, associated cartilage injury is present.[3] He further points out that Roberts and Kelly in 1925, described the victim of this trauma as sitting with the shoulders drooped forward, supporting himself partially on rigid arms, with hands grasping the side of the bed or seat of the chair. They further point out that the thorax is held fixed while breathing is abdominal.

Cardiac contusion, local pulmonary injury and related fractures of ribs or cartilage are the usual associated injuries found. A description of fat embolism as a complication of a fracture of the sternum was not mentioned in any of the articles reviewed. Severe head injuries are not often found in the typical steering wheel injury, probably because the wheel is the decelerative force, and the cranium is spared.

The diagnosis of fracture of the sternum is confirmed, of course, by lateral or oblique x-rays of the bone. The PA view, even when exposed especially to demonstrate the bones, will not usually reveal the fracture. Non-disabling fractures are not being missed today as they apparently were overlooked twenty-two years ago, when Ellis[3] emphasized the need for early diagnosis and treatment. He noted a rather prolonged disability from physical labor to follow in persons suffering with this injury, even when treatment was initiated. A minimum of five or six months was needed for healing of the patients he treated before physical labor could be endured by them.

Treatment

The treatment always consists of the use of some means to stabilize the fracture and return or maintain proper respiratory function. The simplest application of this step is hyperextension of the chest with a blanket roll or pillow underneath. Manipulation in a hyperextended position may be necessary under anesthesia for reduction of an overriding fragment. Application of a T or Y splint to the back in order to hold the shoulders posteriorly may be all that is needed to permit healing. However, it is very difficult to secure complete relief of the pain with this type of immobilization. Appropriate intercostal nerve anesthesia with a long lasting agent such as Rectocaine should be sufficient to make a patient comfortable. No interference with respiratory excursions will occur if the nerve block is placed in the anterior intercostals medial to the mid-clavicular line.

In 1933, Stuck[12] presented a series of the eight cases observed in the Mayo Clinic. He described the use of a T brace to hold the shoulders back in the treatment of the most recent four. The four patients remained in bed respectively, 7, 9, 9, and 10 days each before being up with the brace. Ellis[3], 1935, described a Y splint to hold the shoulders back, describing it as more comfortable than the cross back clavicle splint. On the other hand, Jennings described the course of two patients who had overriding fractures[13] of the sternum, one 63-year-old woman returned three weeks after an automobile accident with a palpable callus which permitted the diagnosis to be made. Other than 6 days of pain, no special symptoms were noted. The second patient, a 62-year-old man, remained in bed two weeks, walking well

at the end of the third week. Goulston, in 1936, reported the case of a 48-year-old male treated by bed rest and hyperextension.[14] At the end of 49 days he was able to walk about freely without a support.

The inherent difficulties of this course of treatment are readily seen in the facts that one to seven weeks of restricted motion is necessary and that frequent mention was made in the case histories of pneumonia and bronchitis developing in 5 to 10 days. Only simple fractures of the sternum without cardio-respiratory difficulties could be handled satisfactorily in this fashion.

The presence of cyanosis and labored shallow respirations due to thoracic splinting from a painful sternal instability with or without paradoxical respirations requires a more active type of treatment.

Sternal Traction

Jones and Richardson[15] in 1926, described the use of sternal traction with a cervix tenaculum anchored into the sternum and maintained with weights and pulleys attached to a rainbow frame in order to correct the paradoxical respirations of a 12-year-old girl who had a crushed left chest. Though the forceps slipped from the sternum the following morning with the skin and fascia supporting the traction, there was continued relief from cyanosis brought on by depression of the anterior left chest wall during inspiration. At the end of 48 hours the respiration was not affected by temporary removal of the traction, and the tenaculum was removed.

Pointing out that while traumatic pectus excavation deserves operative reduction, Ellis stated that the deformity usually will reform due to negative intrathoracic pressure.[3] He illustrated a traction apparatus by means of which Kirschner wires placed under the sternum had a pull exerted through rubber bands. This apparatus modified Alexanders frame[16] so that the lower part of the frame rested on the chest rather than on the abdomen. MacAusland and Tighe[17] the following year described a means of correcting an acute traumatic pectus excavation with traction through Steinmann pins bent at one end to form a hook. Elastic bands and a pulley attached to an overhead Balkan frame maintained the reduction with 7 pounds of weight for four weeks. The use of a corkscrew fixed in the sternum for attachment of traction has been mentioned,[18, 19] but these tend to pull loose too quickly. The use of towel clips is common because they are readily available in any hospital, but they are not strong enough to maintain the traction. The use of the Bennett fracture clamp for grasping the outer table below the fracture for 17 days of traction appealed to Heroy and Eggleston[20] because the method was so simple, efficient and easy to apply, while the clamp was strong enough for any degree of traction. Reynolds[21] designed a multiple purpose pair of tongs for use in sternal traction with the secondary purpose of holding the sternal fragments together. This set was strong enough not to break or slip.

Realizing the need for early ambulation to prevent complications such as thrombophlebitis, hypostatic pneumonia and ileus, Kazuk[22] presented a case in which "ambulatory traction" was used. A towel clamp was fixed in the lower fragment and traction was applied by means of a pulley frame fixed onto the chest.

Internal Fixation

Internal fixation of the fragments has not been widely used for various reasons. In Kazuk's[22] case a tantalun plate used in the sternum for fixation was quickly bent by the paradoxical movement of the lower sternal fracture.

McKim,[23] using local anesthesia, fixed an unstable manubriosternal fracture with two Kirschner wires, left in place four weeks. He felt that the simplicity and effectiveness of this method was sufficient excuse for its publication.

Miscall[24] demonstrated quite a lack of enthusiasm for the use of Kirschner wires to stabilize a sternum which had been mobilized to correct a pectus excavatum. He described a situation in which a Kirschner wire in a 12-year-old patient migrated after 8 months into the pericardial sac after an attack of whooping cough. A bloody pericardial fluid collection had to be corrected by a left trans-thoracic removal of the wire. However, it must be said that the wires were used a bit differently than were those employed by McKim.[23] The two wires were crossed through the sternum so that each wire at operation was fixed to the second rib above and to the 6th or 7th below and on the other side. One of the wires was removed early because it presented itself painfully under the skin in six hours. Thus it can be seen that these wires were not used to fix sternal fragments by internal fixation.

Case Reports

Internal fixation of the sternum, as described in the following four cases, appears to fulfill the cardinal principles of fracture treatment.[25] These are reduction with a minimum of additional tissue damage, fixation with a minimum of interference with continued function of regional undamaged structures, and function throughout healing of the injured region and of the patient as a whole. Finding no other precedent, I would like to present to you the results of Rush Pin stabilization by internal fixation of four cases of fractured sternums. Tracheostomies were performed in 2 cases and were life saving. All four were associated with one or more fractured ribs.

Case 1. (T.W.), a 46-year-old white male was admitted to the St. Joseph Hospital, Lexington, on the 22nd of August, 1952, after receiving a fractured sternum with multiple fractures and a "stoved in" right anterior chest when his car was hit head-on by another automobile. Xylocaine® intercostal blocks, nasal oxygen, and an Ace bandage to splint the chest maintained him fairly comfortably. As the pain recurred he again became cyanotic, and it was decided that the anterior chest fractures must be fixed. The Ace bandage was removed from his chest. The distress became more acute. On the operating table he quickly went into shock, and was resuscitated with overhead traction from a nonsterile towel clip fixed in the right fifth rib anteriorly and by endotracheal oxygen and nitrous oxide. A right anterior incision was placed over the fourth intercostal space and connected to a longitudinal incision over the sternum. The sternum crushed the tracheal rings under the manubrio-gladiolar articulation. The third, fourth and fifth ribs were torn from the right border of the sternum. Two Rush pins were driven cephalad from the mid portion of the body of the sternum into the manubrium with stabilization of the fragments. The anterior wall flap formed by the third, fourth and fifth ribs was wired to the sternum and to the second and sixth ribs. The pleural cavity was decompressed with a water trap. A tracheotomy was performed. After operation a right intercostal Xylocaine - Efocaine nerve block was required for relief of pain. He moved about easily in bed in 2 days and was up easily on the fifth day. The nails were removed on the 13th of January, 1953.

Case 2. (D.M.), a 30-year-old white male was admitted to the St. Joseph Hospital, Lexington, on the 11th of October, 1952, following an automobile accident three hours earlier. His chest hit the steering wheel and fractured the sternum and the right third rib. Because of painful over-riding of the fragments with cyanosis and voluntary splinting, an open reduction with internal fixation of the fragments with a four inch Rush pin was done. He was out of bed walking the next day, but he was not comfortable about being up for a week. The pin was extracted the 28th of January, 1953.

Case 3. (R.F.), a 46-year-old white male was admitted to the Good Samaritan Hospital on the 8th of March, 1957 and discharged on the 16th of March, 1957. His sternum and left anterior ribs (2, 3, 4, 5) were fractured when he went to sleep while driving home from work and wrecked his car. Other injuries consisted of lacerations of the forehead and lips, and fractures to the crowns of the upper incisors. Three Rush nails were required to stabilize the oblique fracture of the manubrium. He was able to be up walking the following day. The three nails were extracted May 7, 1957.

Case 4. (R.S.), a 45-year-old white male was admitted to the Good Samaritan Hospital on the 3rd of September, 1957. He received a fracture dislocation of the spine between thoracic vertebra three and four and a fractured sternum when he fell under a slow moving tobacco truck. Respirations were entirely abdominal. He was paralyzed from below the nipples.

A left anterior intercostal block with Procaine and Rectocaine of the 2nd and 3rd nerves relieved a large part of his sternal pain. Under further local anesthesia, a tracheostomy was performed. The sternum was stabilized with a three inch Rush nail driven across the fractured manubrio-sternal articulations. At this time he was able to use his upper intercostal muscles. He was placed on a Foster frame and was able to be turned at two hour intervals.

Summary

Methods of treatment applied to fractures of the sternum have been reviewed.

Since most of these fractures occur in automobile accidents, the use of safety devices in the car may prevent many of them.

The maintenance of adequate or normal cardio-respiratory physiology by the use of

nasal oxygen, regional relief of pain, and functional fixation of sternal fractures reduces morbidity and promotes fast recovery.

The use of internal fixation of the fractured sternum with Rush nails appears to be a simple and very adequate means of complementing total care of the crushed chest.

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Role of the Ophthalmologist in Acute Trauma*

Robert Wyatt Dockery, M.D.
Louisville, Ky.

INJURIES of the eye often present serious problems of treatment to the physician. They are unfortunately common, despite the protection afforded the eye by nature—that is, its anatomical position in elastic fatty tissue of the orbital cavity overhung on all aspects except downward and outward by sturdy bony projections, coupled with the blink reflex, head turning reflex on approach of objects and copius lacrimation which follows the intrusion of irritant material. These injuries assume unusual social and economic importance through disfigurement, as well as huge cost in human unhappiness, economic inefficiency and monetary loss. Approximately one-half of all uniocular blindness and one-fifth of all bilateral blindness is due to accidents, males being 85-90 per cent of this figure. Two to two and one-half per cent of all battle casualties in World War II were ocular. This seems rather high, especially since the eye only occupies 1/375 of the exposed body surface. Injuries that are minor to other parts of the body are often sufficient to permanently destroy the eye.

Interpreted in their widest sense, ocular injuries constitute a vast subject. We will present the most common types and give some of the cardinal methods of treatment.

The major types of injuries are burns, contusions and penetrating wounds.

Burns

Burns can be thermal, chemical, or radiational. The severity of burns is determined by —(1) The nature of the material, (2) its physical state, whether gas, liquid or solid, (3) its solubility into the cornea, (4) its concentration, (5) its duration of contact with the eye. The chemical reaction with the corneal tissues may be a denaturing of (1) the proteins, (2) the polysaccharides, (3) or lipoids. The latter three result from an extreme pH, chemical binding or an inactivation of the enzyme.

Thermal Burns

Thermal burns may be of either the flame or the contact type. Pathologically, they are similar. The first, however, usually involves the lashes and lids unless the heat is intense and prolonged. The second involves the eyes, as seen in hot water splashes, hot tar, hot lead, or flying ashes.

Tissue reactions from thermal burns are in three categories: (1) mild cases (first degree), with simple hyperemia of the skin and capillary dilatation with edema following; (2) intermediate burns (second degree), which are followed by necrosis of the outer layers of skin. The important feature here is an initial vasoconstriction, followed by an intense capillary dilation and then permeability and maximal leakage from small vessels; (3) higher temperatures (third degree) produce rapid coagulation necrosis and charring of tissues.

Treatment depends upon the degree of injury. Superficial burns will require only protection from contamination and further injury, administered by firstaiders or physicians. Whole thickness burns demand a new covering with grafted skin. The earlier this is done, the better the outlook. First, the burned areas are cleansed of all foreign material. A parasympatholytic drug may be needed to relieve ciliary spasm and Pontocaine® (½%) will help locally to relieve eye pain. Should the cornea be damaged, antimicrobial agents such as bacitracin and also steroids should be used. Fingering of the injured tissues by nurses and physicians must be kept to a minimum.

Chemical Burns

Chemical burns may be due to acids, alkalis or organic irritants. Acid burns are quickly buffered by the proteins of the eye; they coagulate their own protein barrier on contact and as a rule, show an immediate and sharp demarcation of their extent. The clinical course is usually predictable within a few hours after injury.

ALKALI BURNS are much more serious because of their proteolytic character. The end products of alkaline burns are alkaline and this is augmented by the alkalinity of the tears, therefore erosion keeps progressing into deeper tissues. The severity of the burn will be determined by the alkali concentration and duration

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of contact. The use of acid neutralization is condemned, as it will further damage tissue metabolism and creates delay in search for treatment facilities.

ORGANIC IRRITANTS such as brake fluid, usually cause mild edema of the conjunctiva and cornea, and although quite painful, are not likely to produce deep seated damage.

TREATMENT of chemical burns begins with immediate and extensive irrigation with water, saline, or any bland and safe solution. In severe cases, this should be done every few minutes for several hours. The cleanliness of the particular solution used is not as important as the dispatch with which it is applied. Following this, treatment is the same as for thermal burns, except that steroids are stressed to discourage both neo-vascularization and post traumatic inflammation. A glass rod (coated with soft paraffin) may be passed around the fornices to discourage symblepharon formation when appositional surfaces are burned. Some like the plastic conformers for the same purpose. Both have questionable results.

Radiation Burns

RADIATIONAL BURNS may be divided into two categories. (1) Flash burns, which give a thermal type inury due to absorption of a large amount of radiant energy in a short period of time. This type seldom affects the eyes to a serious degree, the lids absorbing the effect. (2) Burns which involve a smaller concentration of energy over a longer period, as solar burns. Here, superficial structures are not affected, since the head is rapidly turned aside when discomfort is felt. But if intensity of the radiation is below the pain threshold, allowing longer exposure with accumulative effect, then the lens and retina may suffer damage, as in eclipse blindness. Here, temporary to permanent central scotomas may follow. The central area is especially involved because the optical system of the eye concentrates incident light on the macula. Absorption of infra red rays is responsible for the lens opacities such as glass blowers cataract.

In any atomic explosion, there are two types of radiation. (1) Penetrating, due to gamma rays and neutrons, and (2) local radiation from beta and soft gamma rays. Eye tissues are not the most sensitive to these radiations.

Injuries by radiation are diagnosed on the basis of history. The patient complains of some photophobia and examination may show ciliary injection and/or punctate corneal or conjunctival staining. Treatment consists of scopolamine (¼%) and cortisone locally, double eye tie, rest and sedation. Late manifestations of radiational burns are not within the scope of this paper.

Contusions

CONTUSIONS are impacts from blunt force, as in a fall or collision with the proverbial door knob. These vary from the simple black eye to complete disorganization of the globe. Should the injury be mild, we call it a concussion, which is described as a reversible injury. In contusion then, we should expect to find the tissues bruised and disorganized, with perivascular hemorrhage seen macroscopically. No break is present in the surface continuity.

Clinically, the most dramatic lesions seen immediately after a severe contusion are intraocular hemorrhage, cataract, tearing of the iris, and gross detachment of the choroid and retina. In less severe injuries, the anterior segment usually presents a traumatic mydriasis, hyphema, small peripheral iris tears, punctate lens opacities, iridodonesis (in posterior subluxation of the lens) and at times an iridodialysis. The posterior segment may show retinal edema with or without hemorrhage, choroidal tears, macula changes, including edema or holes and retinal pigment may migrate into the vitreous. The conjunctiva will likely show ecchymosis and chemosis with blood extravasating into the lids as well. Hypotony is the rule, and the fundus reflex may be obscured by hemorrhage in the vitreous.

PROGNOSIS is guarded, as resolution, in many cases is delayed for long periods of time. Vitreous hemorrhage or blood staining of the cornea may require months to resolve. Injuries may be permanent, as following rupture of the globe, may not be amenable to treatment and may progress as cataracts, while other complications may be delayed as glaucoma or retinal separation.

Initial treatment is critically important. Absolute bed rest, binocular bandaging and sedation are essential until the tissues clear sufficiently for further planning. Cold compresses usually give most relief, but should not be over done. Atropine is not recommended. Of the many proposed procedures for the management of hyphema, I adhere to the middle of the road

course with absolute bed rest, elevation of the head of the bed to allow a portion of the angle of the eye to be free of blood, sandbags, bilateral bandaging and sedation as necessary. There is no clinical evidence for the use of trypsin and there is animal evidence against its use. Rest of the iris is obligatory. No miotics or mydriatics are used.

When the globe is ruptured, meticulous suturing must be done, using the best of eye needles and 6-0 material. Morally, psychologically, legally and technically, it is wrong to remove an eye on initial consultation. Many of these eyes will, surprisingly, have some vision.

With the advent of ACTH and steroids, there is some less danger from sympathetic ophthalmia.

Penetrating Injuries

PENETRATING WOUNDS may be superficial or deep. The first includes abrasions and cuts of the cornea, conjunctiva and sclera. The second is usually seen as a perforation. A baby's fingernail scratching his mother's eye is one of the most common types of abrasion encountered. If only the epithelium of the cornea is involved, it will heal in twenty-four to forty-eight hours, barring infection. A topical antibiotic and firm bandaging will assist in rapid healing. If the abrasion extends into the stroma, a permanent scar will follow in spite of treatment. One unexplained peculiarity of fingernail abrasions is poor adhesion of the epithelium to the stroma, thus creating recurrent corneal erosions weeks or even months later. Treatment now is to remove all the loose epithelium prior to application of the antibiotic and firm bandaging. The rapid healing of the corneal abrasions is achieved through two mechanisms: (1) An "epithelial slide," whereby the cells merely migrate to cover the defect, and (2) a multiplication of the surviving epithelial cells by mitosis to finish the task if the injury is too large for the sliding procedure.

Cuts of the cornea that are small and uncomplicated can be treated with antibiotics locally and immobilization of the lids. The area should first be searched for foreign bodies. If the injury is deeper, and since the degree of scarring is inversely proportional to the accuracy of coaptation, it may be necessary to unite the wound edges with sutures. This is preferable to a conjunctival flap because of greater accuracy and less surgical trauma.

Extraocular Foreign Bodies

Removal of foreign bodies of the cornea should be within the scope of every physician, and primarily the initially consulted doctor. Simple instruments, concentrated lights and patience, which are available to all, are required. A #11 Bard-Parker blade or a sharp hypodermic needle can do the job if nothing else is available. With the cornea under anesthesia after Ophthaine® installation, good illumination and some magnification, as a loupe, the sharp pointed instrument is inserted to the side of the foreign body and flicked up. The flicking up can be carried out on as many sides as necessary for its removal. If a rust ring is difficult to remove at first, bandage the eye and wait twenty-four hours. It will then be softer, and with the same instrument it can be removed. Deeper lying foreign bodies should be removed under careful slit lamp control.

Intraocular Foreign Bodies

If the foreign body is intraocular, the urgency of removal depends on the activity of the material and its location. Vision and the eye are much more likely to be saved if the eye is carefully studied with Sweet X-ray localization and surgical attack carefully planned. Preliminary to surgery, both eyes are kept bandaged. By this means, eye motion is stopped, which discourages more intraocular injury and possible hemorrhage. Tetanus antitoxin and antibiotics to cover both gram positive and gram negative organisms are essential. Posterior foreign bodies should be removed by the posterior route and the anterior route reserved for those in front of the lens-zonular diaphragm. The procedure is much simpler if the object to be removed is magnetic.

CONJUNCTIVAL and SCLERAL injuries are usually of minor importance if the globe is not ruptured. Neither requires suturing unless they are tongue-like or show extensive gaping. If such is the case, undermining of the conjunctiva is advisable to relieve tension before coaptation is carried out. The sclera should be neatly sutured.

PERFORATING INJURIES of the eye occur particularly among children at play and in travel. Industrial accidents have been reduced to a minimum because of safety programs. Once a perforation is diagnosed, further exploration should be deferred until adequate anesthesia and facilities for closure are available. Introduction of infection must be guarded against.

Prolapse of intraocular contents, which serves at first to close the wound and stop further infection, later makes repair of the part a difficult task with respect to retaining useful vision. Clean iris or uveal tissue should be reposed before suturing the wound. Many perforations are complicated by retained foreign bodies. Such a situation constitutes a potentially lost eye.

The DIAGNOSIS of a perforating wound is established by (1) a visible laceration of the cornea or sclera, (2) a shallow anterior chamber, caused by escape of aqueous from a limbal or corneal wound, also a *deep* anterior chamber from a posterior or through and through perforation, (3) reduction in intraocular pressure, which is helpful when hemorrhage obscures the sclera, (4) prolapse of uveal tissue, (5) prolapse of vitreous.

TREATMENT of PERFORATIONS is along the following lines: (1) First, secure complete akinesia and anesthesia, (2) gentle irrigation with warm saline to wash away obvious dirt or contaminating material, (3) release and repositing of incarcerated intraocular contents, if possible, (4) closure of wound, (5) atropine locally to control spasm, and cortisone if indicated, to control inflammation, (6) control of infection due to the injury. Precise, immediate treatment can, at times, be the crucial factor in the eventual outcome.

Injuries of the Eyelids

Wounds of the eyelids vary in their severity according to their location and extent, the superficial ones requiring only coaptation of the skin edges with sutures, while the massive injuries may present, among other things, a cosmetic reconstruction problem. There are only two structures in the lids that can suffer consequential damage: (1) The levator palpebral superioris, which when cut, leads to a traumatic ptosis, (2) the lid margin, injury to which may lead to its distortion and eventual entropion or coloboma, with all the dangers of trichiasis or exposure of the globe. The latter is true if a portion of the lid margin is avulsed.

Horizontal lacerations which are parallel to the orbicularis fibers, require only simple closure with 6-0 silk sutures close together. Vertical lacerations extending through the lid margin require more extensive surgery. When the latter exists, Wheeler's halving procedure is ideal. In this procedure, the lid is split into two laminae for several millimeters on each side of the laceration, then two small triangular portions of the lid tissues are removed, one from the anterior and the other from the posterior sector of the lid. This is so done that when the sutures are brought together, the lines of junction are offset and a scar cannot extend completely through the eyelid at one point.

If the lower canaliculus is severed, epiphoria follows unless it is reconstructed. The big problem in reconstruction is finding the medial segment of the severed canaliculus. If the upper one is intact, then sterile milk injected through it can help locate it. If both are cut, then the milk is injected into the lacrimal sac under pressure. Once the ends are located, several procedures may be used. (1) The insertion of polyethylene, starting at the punctum and extending through the canaliculus and into the appropriate nostril, (2) use of a 2-0 black silk double arm suture which is also passed through the punctum, the canaliculus and sac. Then it passes along the lateral side of the nose to emerge above the medical canthal ligament. It is tied loosely on gauze.

Summary

I have partially discussed burns, contusions and penetrating injuries of the eye and eyelids. Many cardinal points in treatment are given. Of the burns discussed, alkali burns have the worst prognosis. Immediate, extensive irrigation is imperative. Contusions are treated promptly, with bed rest and cold compresses, and penetrating injuries are given the necessary surgical care. Removal of foreign bodies of the cornea should be within the scope of all physicians. Management of intraocular foreign bodies depends upon the activity of the material and its location. Lid injuries that do not involve the levator fibers or lid margins are usually not serious.

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The Surgical Treatment of Tumors of the Parotid Gland

Arnold B. Combs, M.D., and Donald L. Boucher, M.D.
Lexington, Ky.

TREATMENT of parotid tumors, it is generally agreed, has left much to be desired. The lack of knowledge about the natural course of parotid neoplasms, the patient's apathy, and the surgeon's hesitation in performing adequate removal for fear of injuring the facial nerve or of encouraging the formation of fistulae have totalled poor over-all success.

Some physicians have said that it is wise not to operate until pain or trismus necessitates a last ditch attack on the tumor. They believe that if a carcinoma is present, treatment is of no avail. If progress is to be made in treating parotid tumors, that attitude must be vigorously opposed. While the parotid tumor is not considered a common tumor, its incidence has been variously given as from 0.5 to 2.0 per cent of all tumors seen in various clinics, the range depending upon the clinic dealing with the problem.

Characteristics

Age has very little bearing on the incidence. Parotid neoplasms have been seen in the newborn and infant, and in the very old. Hence, age has nothing to do with whether the tumor is malignant or benign. The sex ratio also has no bearing; the incidence is equally distributed between male and female.

Clinically, both benign and malignant tumors of the parotid are characterized by slow growth. On the average, the symptoms have existed between three and four years before the patient seeks medical attention. Again, the duration of symptoms has no bearing on whether the tumor is benign or malignant. Because of the anatomic configuration of the parotid gland, tumors may occur anywhere in an area bounded by the zygomatic process, the ramus of the mandible, the mastoid process and below the angle of the jaw. On occasions, a parotid tumor may present as a rounded mass in the lateral pharyngeal wall. Upon palpation, the tumor may or may not be fixed to the skin. It may be firm or somewhat fluctuant and may be large or small. In fact, the size of the tumor has no relation to whether it is benign or malignant. One benign tumor has been reported as extending from the zygomatic arch to the clavicle.

Differential diagnosis may be difficult. Infectious diseases may cause swelling of the parotid area. Calculi may be instrumental in causing a parotitis. Preauricular and cervical lymphadenopathy may confuse the diagnosis. In addition, silent neoplasm of the nasopharynx, oropharynx, laryngopharynx or mouth may produce metastatic disease with masses in, or adjacent to, the parotid gland.

Diagnosis

Diagnosis, at times, is aided by sialography. However, it will not establish the benignity or the malignity of the tumor. It will, with fair accuracy, establish the presence of a mass in the gland and its position, whether superficial or deep, and whether the mass is intrinsic or extrinsic to the gland. Because the clinical diagnosis is often equivocal, the final authority is always a histologic specimen. It is considered unwise to take a specimen for biopsy without planning to perform a definitive surgical procedure. Therefore on biopsy, if frozen section indicates malignancy, a wide resection is indicated. Aspiration biopsy has its advocates; but if the aspiration is negative on one or two attempts, and the diagnosis is still not obtained, then the physician should proceed with the formal biopsy.

Classification of parotid tumors has always been in a state of confusion, and this paper will not attempt an extended discussion of the histologic types and genesis of parotid neoplasms. It will suffice to say that Conley's classification of malignant tumors is simple and practical. He lists (1) malignant mixed tumor, (2) mucoepidermoid carcinoma, (3) adenocarcinoma, (4) squamous cell carcinoma, and (5) miscellaneous groups. Primarily, the consensus regarding the treatment of parotid tumors, both benign and malignant at present, appears to be surgical excision. The results are difficult to evaluate because parotid tumors tend to recur after long periods of time, and the problems of adequate follow up are ever present. However, the five year cure rate for malignant tumors of the parotid gland appears to average between 25 to 40 per cent depending on the centers reporting, while that for benign tumors is between 70 and 90 per cent.

Important contributions during the past few years have done much to make a classification

of these tumors reasonably accurate, thereby permitting better judgment in carrying out definitive surgery and establishing a prognosis. Again, one of the most important deterrents to surgical management of these tumors in the past has been the fear of injury to the facial nerve. However, technical advances and a more accurate concept of the surgical management of this nerve have done much to eliminate this anxiety. Faradic stimulation is invaluable in identifying the nerve and its branches and helps to avoid injury.

Treatment

Approximately three-fourths of the tumors of the parotid gland are benign. They can all be excised with resultant cure and without permanent damage to the facial nerve. In the remaining 25 per cent of tumors which are malignant, the nerve can be salvaged in approximately half of the cases. The remainder of the malignant tumors can be treated by wide surgical excision with either a partial or total resection of the nerve. When such resection is necessary, of course, facial rehabilitation to some degree is indicated. Approximately 60 per cent of the benign tumors are of the mixed tumor variety.

The surgical treatment of benign tumors, in general, requires a partial lobectomy for small tumors which occupy the lateral lobe. However, if the tumor is very large or if it arises in the isthmus or the medial lobe, then total parotidectomy is indicated. The low grade adenocarcinoma and the low grade mucoepidermoid carcinoma, because of the low mortality rates of 10 to 15 per cent, may be treated by total parotidectomy; the facial nerve can be preserved unless it is directly invaded. If the nerve is invaded, it must be sacrificed.

Very small, highly malignant tumors of the adenocarcinoma, squamous cell carcinoma, mucoepidermoid carcinoma types and malignant mixed tumors, which show no evidence of invasion of the facial nerve and which occupy the lateral lobe of the parotid gland, can be treated by total parotidectomy and neck dissection with preservation of the facial nerve. If these tumors occupy the medial portion of the lateral lobe or arise from the medial lobe or the isthmus, no attempt should be made to salvage the facial nerve since the mortality rate in these tumors is very high. In these cases, facial rehabilitation is necessary. According to Conley, the mortality rate in these highly malignant tumors varies from 60 to 80 per cent.

These highly malignant tumors are all locally aggressive, tend to recur, and show early spread to the cervical lymph nodes. Except for squamous cell carcinoma, generalized spread is frequent. The generalized spread of squamous cell carcinoma is not extensive, although local recurrence and cervical metastasis are common and occur early.

Rehabilitation

Facial rehabilitation becomes an important consideration in patients whose tumors require resection either partial or total of the facial nerve. There are several forms of facial rehabilitation:

(1) *Immediate nerve repair* by direct approximation whenever possible. If a nerve has been sectioned and a segment of it removed, enough mobility may be obtained for end to end anastomosis, which is very desirable since it makes restoration of facial nerve function almost certain.

(2) *Nerve Grafting*: If a large segment of the facial nerve has been sacrificed along with some of the branches, nerve grafts are indicated. The great auricular nerve and the cutaneous sensory nerves are the grafts of choice, as they represent in caliber, the size of the trunk of the facial nerve and its branches. In general, satisfactory rehabilitation and return of nerve function occur.

(3) *Facial Suspension*: If the entire facial nerve and all of its branches have been sacrificed, strips of fascia lata or inert metallic compounds may be looped through the zygomatic bone or attached to the temporalis muscle and extended to the region of the angle of the mouth. This gives support but is probably the least desirable of all of the types of facial rehabilitation.

(4) *Restoring facial balance* by tranquillizing the muscles of the unoperated side and shortening the muscles of the operated side improves the facial expression considerably.

(5) *Muscle rotation techniques* have been carried out with successful results. The masseter muscle or the temporalis muscle may be used. Transposing the temporalis muscle and coronoid process of the mandible to an area just above the commissure of the mouth gives good tone and suspension. The anterior half of the masseter muscle may be attached to the region of the commissure of the mouth and lips to give active physiologic suspension to the face. Muscle transposition may be used as an adjunct

to facial nerve grafting to give good support and tone to the face while regeneration of the nerve is occurring.

Conclusion

The successful management of malignant tumors of the parotid gland is now possible to a much greater degree than in former years because of the important contributions which have been made in clarifying the pathologic classification. The various techniques of facial rehabilitation and a greater knowledge of facial nerve regeneration, in direct anastomosis or with nerve grafting, have eliminated much of the fear of injuring or sacrificing this nerve. The prognosis, in general, is still poor but with improvements in technique and a greater understanding of the pathology of these tumors, the percentage of over-all cure should be greater in the future.

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CASE DISCUSSIONS
From The
University of Louisville Hospitals

Rehabilitation In Sequelae Of Acute Carbon Monoxide Poisoning

Louisville General Hospital

Presentation by Rex O. McMorris, M.D. and Robert Maxwell, B.A.

History

J. A., a 19-year-old white male, was admitted to the Louisville General Hospital on March 31, 1957 in an unconscious state along with his wife. Their baby was found dead. They were found after 18 hours' exposure in an apartment having a lighted gas burner with a defective flue. Upon discovery, he was lying face down, fully clothed, with right arm folded under the chest. Oxygen was started immediately and continued after admission.

Physical Examination

Physical findings included: Blood pressure, 120/70; pulse rate was 120/minute; and respiratory rate was 28/minute. The skin was noted to be pale, with a pink tinge over the face; there were numerous raised, erythematous areas over the anterior thorax, over the knees, and the dorsum of both feet. Erythematous-urticarial-like areas were noted in the anterior fold of the left axilla and over the web between the thumb and index finger of the right hand. As noted above, these two areas had been held pressed together by the body weight. The left eye was swollen shut by marked peri-orbital edema. The head and both eyes were turned to the right; the pupils were equal and reacted sluggishly to light; the conjunctiva was markedly injected, and fundoscopic examination showed engorgement of the retinal vessels; corneal and gag reflexes were equal bilaterally. The neck was supple, and there was no lymphadenopathy present. Examination of the thorax revealed a markedly diminished costal component to respiration; each expiration was accompanied by a grunting sound. Auscultation of the lungs revealed many inspiratory rhonchi over both lung fields, and a few coarse rales in the left base. Examination of the cardiovascular system was normal except for the tachycardia (120/minute). Examination of the abdomen was normal, and there was no enlargement of the liver and spleen. The patient groaned during deep palpation of the abdomen. Deep tendon reflexes were slightly increased on the right; plantar stimulation elicited bilateral Babinski responses. He responded only to pain.

Laboratory Findings

Laboratory findings included a Hemoglobin of 18.0 gms. %; white cell count of 34,000, of which 88% were polymorphonuclear leukocytes, 12% lymphocytes; hematocrit was 46, NPN was 110 mgm. %, and blood chloride was 106 mEq./L. Urinalysis was normal.

Hospital Course

A Foley catheter was inserted and prophylactic penicillin, continuous oxygen and intravenous fluids were started the first day. On the second day, an electroencephalogram was interpreted as being compatible with a moderately diffuse encephalopathy. The patient remained comatose. His left axilla was noted to show brawny induration. Body temperature of 102.4 orally and increased rhonchi in the left chest were noted, and a tracheostomy was performed because of retained mucous and development of cyanosis. Penicillin was administered in large doses. He was unresponsive until April 4th, at which time the edema of the face had receded; and the lesions over the left axilla and the right hand began to break down. By April 13, 1957, the patient was semi-conscious, but did not speak; he did not seem to be aware of his environment. On April 17, 1957 he had a generalized convulsion, and Dilantin and phenobarbital were started. By April 30, 1957 the patient was able to chew gum, smoke cigarettes, and eat well, but showed no comprehension when spoken to. He moaned and cried out at intervals for no apparent reason and

was extremely restless. On May 13, 1957, he was transferred to the Rehabilitation Ward.

Rehabilitation of the Sequelae

The primary sequelae resulting from the carbon monoxide poisoning were the central nervous system disturbances including the psychic, intellectual and emotional abnormalities, the spastic quadriplegia, the superficial lesions and the resultant social and vocational problems.

Upon transfer to the rehabilitation service the patient was in a peculiar semi-conscious state, being completely mute except for the aforementioned spontaneous outcrying. He would follow people and objects with his eyes with no apparent recognition, even of members of his family. On May 16 he started responding with one word, "yes" or "no," to spoken questions. On May 18 he had a remarkable clearing of his sensorium and was able to talk in complete sentences with no speech defect. He still had some confusion, occasional inappropriate smiling and rarely grimacing. He became fairly well-oriented as to place within approximately two weeks and as to time, within four to five weeks.

By June 18th he had cleared enough mentally that we felt it would be of value to test for intellectual impairment. Psychometric examinations were completed and compared to his responses to IQ testing at the age of 14. It was found that he was functioning at a dull normal level and showed no deterioration from his previous testing. This, however, ignored several years of intellectual growth. He demonstrated an impulsiveness and inappropriateness in some of his answers to the test which suggested some residual central nervous system disturbance at that time. Later, although he still demonstrated some emotional liability and some childlike responses, he became an active participant in the recreational therapy program and was pleasant and cooperative. We were unable to assess how near this behaviour was normal for him.

The residual physical disabilities were treated on an intensive basis with physical and occupational therapy and rehabilitation nursing. The trachiostomy tube was gradually reduced in size and within two weeks was removed with complete spontaneous closure of the fistula. Early, while he was still in a spastic quadriplegic state with contracture-like stiffness in the joints, he received general body-heating, followed by active stretching and muscle re-education exercises to all four extremities. By May 18th, when he had regained enough power, arm and leg exercises and graduated standing on the tilt table added. In the latter procedure, he was strapped to a table that could be tilted at various angles until he was brought up to a 90° or upright position. He rapidly developed enough strength to bear his weight, but he showed a transitory astasia-abasia wherein, although the legs were under control and by test were of adequate strength, he was unable to stand alone or walk without assistance.

By June 4th he had gained enough strength in his legs that crutch-walking was started and standing tolerance training was intensified. By June 18th he had regained sufficient muscle power in the lower extremities to walk without support with no visible residual weakness in the lower extremities. Although this same program of intensive exercises were applied to the upper extremities, he retained considerable weakness in the left arm, both hands and wrists, producing a bilateral wrist drop with almost complete paralysis of finger flexors. The right hand showed return of strength a little sooner than the left, and eventually gained more overall strength. Both hands started developing some deformity because of muscle imbalance, and bilateral wrist and hand splinting was necessary.

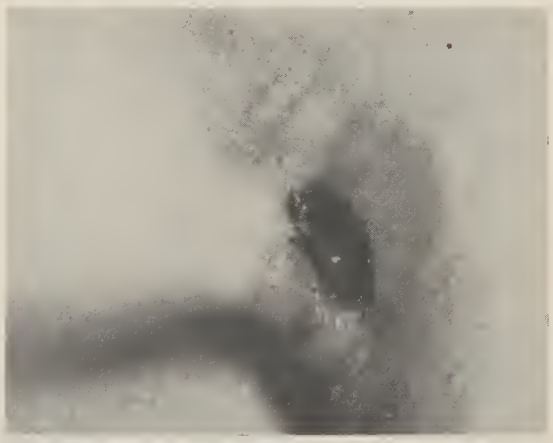


Fig. 1

The lesion in the left axilla went on to slough completely through the subcutaneous tissue to the underlying musculature (Fig. I). Although this lesion was very slow in healing, it was complete by July 11, with little scarring (Fig.



Fig. 2

II). The lesion in the thumb web of the right hand sloughed with necrosis of underlying muscle. As healing took place, considerable contracture was formed. Intensive ultrasonics therapy with passive stretching failed to prevent almost complete apposition of the thumb to the side of the index finger. The scarring of the palmar tissue prevented full extension of the second and third metacarpophalangeal joints (Fig. III).

On July 15th surgical excision of the fibrotic area and a skin graft was performed on the right hand lesion which allowed him to pull the thumb away from the palm and fingers, approximately two inches and oppose the thumb to the fingers (Fig. IV and V). After recovery his program was continued as an outpatient. By October 18 it was found that he could extend the fingers on the left hand and the left wrist to beyond the neutral position and could pull against some resistance. The right hand retained some flexion deformity of the metacarpal-phalangeal joints; approximately 30°.

Upon discharge on January 6 he no longer needed splints, and had good function in all the musculature of both upper extremities, retaining some residual weakness in the finger flexors and extensors and intrinsic musculature of both hands.

In the Activities of Daily Living training program, the urinary catheter was removed as soon as he was able to cooperate and within a matter of 36 hours he had complete bladder and bowel control. All other activities leading to self-care independence, such as taking care of toilet needs, dressing and undressing, etc., were considered early in his training. It was necessary to fabricate especially adapted eating utensils and other adaptive equipment. By June 18th he was able to maintain complete self-care.

The social problems encountered during recovery were many and varied, requiring frequent counseling by the medical social worker. Informing him of the death of his child and the management of a complicated interfamily conflict were accomplished with little emotional trauma. Guidance in selection of a better living situation after discharge was successful.

At discharge it was recommended that he return to his previous place of employment, which involved assembly line work, with the only limitation being the possibility of easy fatiguability in the intrinsic hand musculature, with no limitation as to ambulation, standing, or any other activities. This recommendation was based on the testing and counseling of the vocational counselor. Last known information concerning this patient was that he was being considered for re-employment.

Discussion

The case presented illustrates that in spite



Fig. 3 Fig. 4 Fig. 5

of severe sequelae in some cases of carbon monoxide poisoning, the ultimate prognosis is usually good. This case also illustrates the need for the utilization of various medical specialties and the ancillary services of physical therapy, occupational therapy, rehabilitation nursing, recreational therapy, the psychologist, the social worker, and the vocational counselor—all working as a closely knit team in a total rehabilitation program. By applying an eight to ten-hour day rehabilitation program to this patient in the early phases of his recovery, it is felt that many complications were avoided.

Unfortunately, there were no gas analyses made of the CO concentration in the room where the patient was exposed, nor were there any Carboxyhemoglobin determinations made. The latter test is necessary for absolute diagnosis. Diagnosis in this case was based on the history and physical findings—no autopsy was performed on the dead baby. The case described, exhibited definite neurological symptoms, abnormal skin color with localized lesions, chest signs, localized edema and a leukocytosis, all of which are indicative of severe carbon monoxide poisoning.[9]

Tne presence of skin lesions seen early after poisoning is said to be diagnostic of acute carbon monoxide asphyxia[10] and are similar to those reported by several authors.[1, 2, 5, 8, 10, 13] In one series of 105 cases, the presence of skin lesions were reported in 31.[9] Most authors attribute these lesions to the profound tissue anoxia as well as the effects of prolonged pressure over these areas. These lesions were reported to have various appearances, some resembling erythematous patches, while others were in the form of blebs, bullae, or urticarial elevations; many of them are often mistaken for burns.

Since this patient was exposed to a faulty flue, it is possible that he had chronic CO exposure. Several investigators found a polycythemia in animals after chronic exposure to carbon monoxide.[6, 7] It has been pointed out that acute CO asphyxia will produce polycythemia.[4] The basis for this erythrocytosis is not well understood; hemoconcentration, bone marrow mobilization, and splenic contraction—all may contribute to this picture.[16]

The leukocytosis with a preponderance of neutrophils may have been produced by a pre-existing upper respiratory infection, but this picture has been described in cases of acute CO intoxication, as one manifestation of bone marrow stimulation in CO poisoning.[4, 16] This type of leukocytosis has also been described in cases of cerebral hypoxia from other causes.[15]

The convulsions that this patient experienced are thought to be on the basis of cerebral edema, and may occur during actual exposure to CO. Convulsions are unusual during the period of poisoning, but often occur in those who are recovering from the effects of CO. They are usually of epileptiform type, although choreic movements have been noted.[12, 14]

The confusion and disorientation of this patient was in accord with most of the severe cases described in the literature. Some individuals showed profound psychological changes, but they were often superimposed on a pre-existing psychotic condition as manifested by suicidal attempt.[11, 14, 17]

Astasia-abasia has been reported in two cases,[3, 18] and we noted it in this patient in a very transient form. The profound neurological adnormalities and skin lesions exhibited by this patient, with almost complete recovery, have been reported commonly in the past,[14] but few showed as many different types of severe sequelae and lived. The multi-disciplinary, concentrated rehabilitation program applied to this patient has probably obviated many possible residual disabilities.

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SPECIAL ARTICLES

The Price Of Freedom

J. Duffy Hancock, M. D.
Louisville, Ky.

THE medical profession need not be and must not be the advocates of a lost cause. The forces of socialized medicine have not limited their efforts to one type of approach. It is possible that their foot is in the door with recent legislative measures. Certainly they have taken heart and indefatigably push this issue.

The threat posed by a vocal and powerful minority must be met head on. This minority is in a position to capitalize on existing dissatisfaction and to create further demand for medical control in a "welfare state." The threat is growing rather than subsiding. Voluntary prepayment plans must be constantly improved—guided—and protected from abuse.

The public has long recognized the necessity of prepayment plans which would enable them to budget for the necessarily increasing cost of health care. It is our part to successfully oppose those who contend that the only satisfactory solution is medicine paid for and controlled by the government. Many of our own profession and other earnest-minded Americans feel that basic freedoms are involved and that the voluntary system of medicine which has done so much for this country offers both the best and the most economical method of dispensing health care to our people. The battle lines are drawn. . .on one side, the advocates of an ever-stronger central government . . .a small group attempting to gather to itself the powers and privileges of the many; to parcel them out in, at best, a dubious manner. On the other side, quite simply, are the advocates of individual freedom.

What is happening now? Let the record speak. Today, over 121 millions of persons have helped solve their surgical expense problem by private means. A leader in prepayment plans is Blue Shield. In Kentucky alone, there are about one half million Blue Shield members. The widespread acceptance of Blue Shield means that the doctors are meeting the enemy head on, have found an answer both practical and workable. However, a large percentage of Kentuckians still have no prepayment plan or an inadequate one, and constant effort is needed to remedy this situation.

The appeal of this plan is evident in the concept that now pervades the thinking of the medical profession and of a large segment of the public regarding Blue Shield. No longer is the doctor placed alone in the position of opposition to a "popular" cause. No longer is he fighting a "sacred cow." Today the doctor has arrived at a point most feared by the advocates of socialized medicine. He has criticized the theory of government control, found a plan to confound the opposition, and has proved this plan to be workable.

Now that we have demonstrated through Blue Shield the manner in which collective and free action can handle the problem, we must go a step further. In the battle between privately-controlled prepayment for medical care and a government-controlled mechanism, we must think positively, not negatively. In very truth, we are engaged in a crusade. This crusade is a preventive action undertaken with zeal and enthusiasm. In the face of villification, we have carried on with earnestness and conviction. Because of our plan, Blue Shield, we have preserved factors that we might otherwise have lost; factors of great value. Not the least of these is the preservation of the vital doctor-patient relationship.

Blue Shield is your plan, Doctor. It is yours individually, and it is ours collectively. It is a co-operative effort sponsored by the medical profession to satisfy a public need and still retain in qualified hands the policy-making powers regulating medical practice. Where Blue Shield has entered the picture, nowhere have the rights of doctors been usurped. Nowhere has there been dictation as to how medicine is to be practiced. With Blue Shield, this need never be feared. The doctor not only has a voice in Blue Shield . . . the doctor *is* Blue Shield. We, the medical profession, conceived it, we set it in operation in Kentucky, and we have nurtured it over the years.

As has been evident in this area and elsewhere, the battle has not been easy. The enemy does not give up easily. We have exploded his original issue that only the government could offer a workable mechanism. But, when a misguided group follows a target, rational issues are not needed. We must be on guard, at all times.

The public looks to the doctor for guidance. We are opinion-moulders. Through advocacy of Blue Shield, we can influence to the good. All that is needed is to let the public know that we, members of the medical profession, recognize Blue Shield as the only solution to the problem. Let the public know about the plan, and, more important, how you feel about it. And, talk not only to your patient, talk also to the other moulders of opinion, the businessmen, about Blue Shield. As businessmen, and as centers of influence, they are as vitally interested in this problem as you are.

History shows that when socialism comes, in, it begins in the medical field, and spreads its tentacles else-

(Continued on page 479)

EDITORIALS

We Must Find A Way

DURING the 1958 session of the Kentucky Legislature, identical bills were introduced into both houses simultaneously. The bills purported to provide a free choice of physician to beneficiaries of medical service plans providing medical care. Doctor J. E. Johnson, a Senator, introduced the bill in the Senate, and Rep. Sam Hale, a card-carrying member of the UMWA, introduced the bill in the House. These bills were sponsored by the Kentucky State Medical Association. In the Senate the bill passed by a majority of 29 to 6.

Interest in the proposed legislation was so widespread that a hearing on the Bill was called by the Speaker of the House so that those most interested in its passage and those opposed to it could present their views to the House members before they were called on to vote. The hearing was held during the last 10 days of the Legislative Session and for one reason or another it never came to a vote.

Those of us who attended the session of the Senate when it passed the Bill and the hearing before the House of Representatives were there because we felt vital issues were at stake. The discussions presented tended to clarify the divergent views and place in rather bold relief the circumstances which for several years have presented a difficult problem to the Kentucky State Medical Association.

The immediate point at issue, although by no means the only one, is the operation of the United Mine Workers Welfare Fund Hospitals in Eastern Kentucky. The proposed legislation was designed to promote more harmonious operation between this and other similar groups, with physicians in private practice; to render better medical service to the people; and to more equitably distribute the care of the medically indigent. Since the measures were not enacted into law we can never know whether this intent would have been accomplished. The problem is still before us and for the present the only recourse open is that of intelligent arbitration of our differences as has been attempted in the past.

We believe that there were some cases of inadequate medical care in Eastern Kentucky before the United Mine Workers Welfare Fund established hospitals there, and that there has been some abuse of their services by some private physicians during the first few years of operation. But we do not believe the medical care to miners by private physicians was so deplorable as presented at the hearing, nor that abuses of the Welfare Fund Services has been so widespread or malicious as was portrayed.

We believe that the seven modern hospitals established by the Fund in Eastern Kentucky and staffed by excellent men have the potential of tremendously improving the quality of medical care to miners and other citizens of the area —but we do not believe that the care provided now is so superior or faultless as was described at the hearing.

The KSMA Bylaws provide that "each County Society shall be the sole judge of the qualifications of its members." Four counties have seen fit not to accept physicians employed by the UMWA Hospital chain as members. Some, perhaps, feel this is unfortunate and embarrassing to all concerned. It would appear that neither group is wholly at fault in this situation.

The operation of these hospitals in our state is, as we understand it, a pilot experiment. We believed at the inception of the plan that we as a state were fortunate, and the Eastern part of the state was to be congratulated. The problems arising since have tended to raise in our mind some question as to how singularly fortunate we were to be the testing ground. But the period of time has been short to place in operation such a plan and eliminate the defects, which certainly it was bound to have.

Opinions expressed in contributions to The Journal are those of the writers and do not necessarily reflect the views of the Kentucky State Medical Association.

The legal phase of the discussion is now passed—neither won or lost. It is perhaps better that we are left to arbitrate our differences, which certainly are not insurmountable. Surely the Fund can find the way to operate these hospitals in closer cooperation with the physicians of the area and with greater good will. Some adjustments of the Hospitals' relationships and procedures must be made, thus removing the barrier that appears to make these excellent physicians employed by the Hospitals ineligible for membership in their county medical societies. The ability of these, more than a hundred well trained physicians recently come to Kentucky, and the seven modern well appointed hospitals should be used to the greatest benefit of our citizens. We must find the ways by which this can be accomplished.

Sam A. Overstreet, M.D.

A New Addition

THE first of a series of Case Reports from the Files of the Committee for the Study of Maternal Mortality appears in this issue on page 422.

Through these reports, it is hoped to bring the work of the Committee to the attention of Kentucky physicians. In its study of maternal deaths in the state, the committee uses codes to maintain the anonymity of both patient and physician.

Its purpose is, if at all possible, to improve practice to the point where some of the difficulties apparent in this study could possibly have been avoided.

Where the word "preventable" is used by the Committee in classifying a death, it is not intended to imply that negligence is involved. It means simply that under ideal conditions (hospital and otherwise), ideal judgement, and ideal patient cooperation the course of events might have been altered.

When death is classified as "preventable," the committee does so with full recognition that all the facts may not have been available to the group, but on the basis of the facts submitted, it was felt that the course of events might have been altered if certain modifications of management, judgement, and therapy had been undertaken.

Your comments on this new feature will be welcomed.

Don't Miss . . . .

YOUR Councilor District Meeting

Check the Organization Section for Full Details

ORGANIZATION SECTION

Color TV, Panels, Exhibits Planned for 1958 Annual Meeting

Variety will keynote the KSMA 1958 Annual Meeting in Louisville on September 23, 24, and 25, according to Edward B. Mersch, M. D., Covington, KSMA president and chairman of the Committee on Scientific Assembly and Arrangements.

Plans are progressing according to schedule and a diversified program designed to appeal to both the general practitioner and the specialist is on the agenda.



Dr. Keown

On-the-spot color television originating from General Hospital will again be included on the program. Besides the scientific presentations, there will be panel discussions, specialty group meetings and scientific and technical exhibits.

Among the speakers already announced for the meeting are: Kenneth K. Keown, M.D., professor of anesthesiology at the University of Missouri Medical Center, and Edward G. McGavran, M. D., Dean of the School of Public Health, University of North Carolina.



Dr. McGavran

The son of a physician, Doctor Keown is the author of "Anesthesia for Surgery of the Heart." A member of the Board of Governors of the American College of Anesthesiologists, he is a graduate of Hahnemann Medical College in Philadelphia, class of 1941. He was staff anesthesiologist at Hahnemann until 1957 when he accepted the position in Missouri.

Doctor McGavran, guest of the Kentucky Public Health Physicians, has been in his present position since 1947. He served as U. S. Delegate to the World Health Conference in Geneva, Switzerland, in 1952. He has been professor of preventive medicine and public health at the University of Kansas Medical School, Health Commission of St. Louis County, Missouri, and professor of public health and preventive medicine at Washington University Medical School.

Council to Improve Health of Aged Formed by Four Groups

A Joint Council to Improve the Health Care of the Aged has been established by the American Medical Association, the American Hospital Association, the American Dental Association, and the American Nursing Home Association.

The Council, which has been under consideration for some time by the sponsoring groups, is made up of three representatives of each sponsoring organization.

Its objectives are: 1. To identify and analyze the health needs of the aged, 2. To appraise available health resources for the aged, and 3. To develop programs to foster the best possible health care for the aged regardless of their economic status.

One of the Council's first jobs will be the determination of the exact problems of the aged. Although studies have been made in the past several years by organizations making up the council, research will be intensified and projects for meeting the problem will be activated as rapidly as possible.

The need for new programs in this field has come about because of the constantly increasing life expectancy. In 1935 life expectancy averaged 60.2 years. The most recent figure indicates it to be 70.0 years.

One of the principal immediate projects of the council will be the development of programs and facilities to be tailored to the health needs and finances of the aged.

7th District Plans Meeting May 22 at Frankfort C. C.

Plans for the annual dinner meeting of the 7th Councilor District at the Frankfort Country Club on Thursday, May 22 are well underway, according to Branham B. Baughman, M.D., Frankfort, district councilor.

Wives of members are cordially invited to attend the meeting which will have Edward B. Mersch, M.D., Covington, KSMA president, as featured speaker. Doctor Mersch's talk will be entitled, "Its Time for the Bug Killer."

The Franklin County Medical Society, headed by John B. Clay, M.D., Frankfort, will be hosts at the meeting. An advance letter to members will announce the complete program of the meeting, Doctor Baughman said.

Dr. Archer Elected Chairman of Nominating Committee

James W. Archer, M.D., Paintsville, was elected chairman of the 1958-59 KSMA nominating committee at the first meeting of the committee at the County Society Officers Luncheon in Lexington.

Other members of the nominating committee are: Joe M. Bush, M.D., Mt. Sterling; Howell Davis, M.D., Owensboro; W. V. Lyon, M.D., Ashland; and Carroll Witten, M.D., Louisville.

The committee will nominate general officers for the 1958-59 year and report to the House of Delegates at the annual Meeting in September.

Doctor Archer urged any county society or individual who would like to suggest a name for consideration for a given office, to do so by contacting either the KSMA Headquarters Office, 1169 Eastern Parkway, Louisville, or one of the committee members.

4th and 6th Districts to Meet at Mammoth Cave Hotel

A program headlining Edward B. Mersch, M. D., KSMA president, and four members of the University of Louisville School of Medicine faculty has been announced for the meeting of the Fourth and Sixth Councilor Districts at Mammoth Cave Hotel on June 12.

Announcement was made by W. Keith Crume, M. D., Bardstown, and John P. Glenn, M. D., Russellville, Councilors from the Fourth and Sixth Districts, respectively.

The meeting will start at 3:30 with three scientific presentations scheduled before dinner and President Mersch's talk and another scientific paper scheduled for after dinner. Wives of members are cordially invited to attend.

Following is the list of speakers and their subjects in the order in which they will appear on the program.

Walter S. Coe, M. D., chief of the section on general medicine, "The Diagnosis of Primary Hypertension and the Complications of Treatment"

Arthur M. Schoen, M. D., chief of the section on gastroenterology, "Gastrointestinal Hemorrhage"

Joseph A. Little, M. D., associate professor of pediactrics, "Medical Emergencies of the Newborn"

Edward B. Mersch, M.D., KSMA president, "The Untroubled Man."

Arthur H. Keeney, M. D., instructor in ophthalmology, "Principles of Management in Non-Emergent Ocular Disease"

KSMA President to Speak June 18 at 14th District Meeting

The annual afternoon and dinner meeting of the 14th Councilor District in Hazard on June 18 will feature a talk by KSMA President Edward B. Mersch, M.D., Covington, entitled, "The Intruders."

Three Louisville physicians will make up the scientific portion of the meeting which is tentatively scheduled for the new Citadel Motel in Hazard, according to Charles C. Rutledge, M.D., Councilor for the 14th District. The meeting will start at 3:30 p.m.

Following is a list of scientific speakers and their subjects:

Ralph Denham, M.D., "New Aspects of Iatrogenic Heart Disease"

Herman Mahaffey, M.D., "Surgery of Arteriosclerosis"

Harry S. Andrews, M.D., "The Allergic Child and Its Problems in Practice"

Co. Society Officers Conference Attended by 137

Gunnar Gundersen, M.D., president-elect of the American Medical Association, voiced the belief that this country's medical practitioners may be losing the freedom to develop ideas as individuals in an address at the luncheon session of the County Society Officers Conference in Lexington on March 27.

Doctor Gundersen stated that the U. S. has gained medical leadership because "we base our work on the individual, and the understanding and cooperation that can exist only between individuals." He expressed the conviction that the U. S. may be losing this freedom and warned of the dangers in following the European pattern of step-by-step surrender to the systematically managed society.

"Whatever superiority we achieve in the future, will continue to come through the ideas of individuals who have the freedom to develop them," he said. He pointed out that social planners have already shown their power by bringing into everyday life increasing government interference and regulation.

Other speakers on the day-long program attended by 137 Kentucky physicians covered third party medicine, voluntary health plans, surveys, the problems and programs of medical legislation, and the medicare program.

Thomas H. Alphin, M.D., director of the Washington, D.C., office of the American Medical Association, talked about some of the latest medico-legal developments on the Washington scene.

Medicare's progress durings its first 15 months of operation, was discussed by Major General Paul I. Robinson, executive director of the Dependents' Medical Care Program.

How the Kansas Medical Society set up a survey,



KSMA President Edward B. Mersch, M. D., Covington, is shown presiding at the luncheon meeting at the County Society Officers Conference in Lexington.



Presidential matters were the order of the day when four presidents got together at the officers conference. From left to right are—Edward B. Mersch, M. D., Covington, KSMA president; Mrs. J. Andrew Bowen, Louisville, president of the KSMA Woman's Auxiliary; Gunnar Gundersen, M. D., LaCrosse, Wisconsin, president-elect of the AMA; and Robert B. Warfield, M. D., Lexington, president of the Fayette County Medical Society.

what worthwhile information it produced, and what valuable uses are being made of the results, were described by Oliver Ebel, Executive Secretary of the Kansas State Medical Society.

Robert B. Throckmorton, Des Moines, attorney for the Iowa State Medical Society, demonstrated the ways in which his society planned a successful legislative program on the state level.

Arthur J. Clephane, Philadelphia, attorney for the Pennsylvania State Medical Society, described Pennsylvania's experiences with the problems of third party medicine.

The importance of Blue Shield Plan cooperation on a nationwide basis was stressed by John Castellucci, executive director of Blue Shield Plans. He also warned of the dangers inherent in the adoption of other voluntary health plans.

Edward B. Mersch, M.D., Covington, president of the KSMA presided over the morning and luncheon sessions. Robert W. Robertson, M.D., president-elect, presided during the afternoon session.

Program of 12th and 15th Dist. Meet Announced by Councilors

"Why This Harvest" is the title of the address which Edward B. Mersch, M. D., KSMA president, will give before the 12th and 15th Councilor Districts at their joint dinner meeting at Cumberland Falls on June 19, according to a statement from District Councilors Garnett Sweeney, M. D., Liberty, and Keith P. Smith, M. D., Corbin.

The program, which will include scientific presentations by four members of the University of Louisville faculty, will start at 3:30 p.m. A cordial invitation to attend is extended to wives of members.

Three scientific speakers will speak before dinner at 6 p.m. and Doctor Mersch and the other scientific speaker will talk following the dinner.

A list of program participants, arranged in the order in which they will speak, follows:

Malcolm M. Stanley, professor of experimental machine, "Peptic Ulcer"

William C. Adams, assistant professor of child health, "Childhood Tuberculosis"

Robert Lich, Jr., M.D., professor of urology, "Significance of Bladder Dysfunction."

Edward B. Mersch, KSMA president, "Why This Harvest"

Beverly T. Towery, professor and chairman, department of medicine, "The Diagnosis and Management of Parathyroidism."

CD Meetings Scheduled in June

Two medical civil defense meetings will be held in San Francisco immediately preceding the AMA's 107th Annual Meeting. On June 19-20 the 12th Naval District will sponsor a symposium on "Medical Problems of Modern Warfare and Civil Defense" at the U. S. Naval Radiological Defense Laboratory. On June 21 the AMA Council on National Defense will sponsor its 6th annual medical civil defense conference at the Sheraton-Palace Hotel.

David B. Allman, M. D., AMA president, will speak at the naval symposium and Gunnar Gundersen, M.D., AMA president-elect will welcome participants to the AMA's civil defense meeting on June 21. All physicians interested in civil defense planning are urged to attend these two worthwhile meetings.



Medical association attorneys—Robert B. Throckmorton, DesMoines, attorney for the Iowa State Medical Society; E. Gaines Davis, Frankfort, who serves KSMA; and Arthur J. Clephane, Philadelphia, who handles legal matters for the Pennsylvania State Medical Society—discussed current legislative problems at the County Society Officers Conference on March 27.

Miss Stilz Honored for 35 Years of Service to KSMA

Violet Stilz, bookkeeper in the KSMA Headquarters Office, was honored for more than 35 years of loyal service during the luncheon at the County Society Officers Conference.

In presenting her with a gold watch appropriately engraved for the occasion, Woodford B. Troutman, M.D., Louisville, KSMA secretary and treasurer, called it "a token of appreciation for long, loyal, and efficient service."

Doctor Troutman praised Miss Stilz for her good work as bookkeeper and stated that "our auditors tell us her work is excellent." She began working for the Association in 1923 when it was located in the old Board of Health Building at Sixth and Main Streets in Louisville.

Renegotiation Date of Medicare Scheduled for June

Renegotiation date for the contract between the KSMA, the U. S. Department of Defense, and the physical agent for the renewal of the Medicare Contract has been scheduled for Monday and Tuesday, June 2 and 3 according to Robert C. Long, M.D., Louisville, chairman of the Committee on Medicare.

All county medical societies and specialty groups have been alerted by Doctor Long's committee to send in suggestions to the KSMA Headquarters Office on or before Friday, May 16, for consideration by the Medicare Committee as it prepares to go to Washington. Doctor Long emphasized that he wanted all elements within the profession that wished to make any comments on Medicare to have an opportunity to do so.

Members of the Medicare Committee in addition to Doctor Long are: Delmas M. Clardy, M.D., Hopkinsville; O. Leon Higdon, M.D., Paducah; Thomas O. Meredith, M.D., Harrodsburg; and Carroll L. Witten, M.D., Louisville.

Combined Meet in Paducah, May 28 Features Panel Discussion

Five members of the faculty of the University of Tennessee College of Medicine will participate in a panel discussion at the combined meeting of the 1st Councilor District, the McCracken County Medical Society, and the Southwestern Kentucky Medical Society at the Irvin Cobb Hotel in Paducah on May 28.

Announcement of the Wednesday evening program, including the panel on "The Place of Chemotherapy in the Treatment of Cancer Patients," was made by J. Vernon Pace, M.D., Councilor for the 1st District.

Harwell Wilson, M.D., professor and chief, division of surgery, University of Tennessee College of Medicine, will moderate the panel. Participants will include: A. W. Julich, M.D., department of medicine; T. D. Moore, M.D., professor of urology; J. D. Pigott, M.D. and E. F. Skinner, department of surgery.

W. Burton Haley, President of the McCracken County Medical Society, will preside at the meeting which will start with a social hour at 6:30 and dinner at 7. Winfield Stryker, secretary of the Southwestern Kentucky Medical Society, will make an announcement on the future of the Southwestern Society.



Honored at the county society officers luncheon for over 35 years of loyal service to KSMA was Violet Stilz, at right, shown receiving a gold watch from Woodford B. Troutman, M. D., Louisville, secretary and treasurer of the Association.

Kentucky Surgical Society Elects at Annual Meeting in April

H. Hart Hagan, M.D., Louisville, was elected president of the Kentucky Surgical Society at its ninth annual meeting held jointly with the Virginia Surgical Society at the Greenbrier, White Sulphur Springs, West Virginia, April 11 and 12.

Doctor Hagan succeeds R. W. Robertson, M.D., Paducah, KSMA president-elect. Ballard Cassady, M.D., Ashland, was elected vice president. C. Melvin Bernhard, M.D., Louisville is continuing his term as secretary.

At the meeting which was attended by 36 members and 15 guests, W. H. Pennington, M.D., Lexington, succeeded to the position of chairman of the Council. Other council members are Francis M. Massie, M.D., Lexington, and Doctor Robertson. Doctors Hagan and Bernhard will serve on the Council in an ex officio capacity.

New fellows of the Society are: Benjamin D. Boone, M.D., Louisville; James A. Harris, Lexington; David A. Hull, M.D., Lexington; Walter I. Hume, M.D., Louisville; Douglas H. Jenkins, M.D., Richmond; William C. Roland, M.D., Ashland; William T. Rumage, M.D., Louisville; Bernard J. Schoo, M.D., Louisville; Richard H. Segnitz, M.D., Lexington; Ralph G. Thomas, M.D., Leitchfield; Elbert C. Whitaker, M.D., Berea.

Next year's meeting is tentatively scheduled for French Lick, Indiana, according to Doctor Bernhard.

Administrator at General Named

George M. Brewer, former assistant administrator of Presbyterian Hospital in Albuquerque, New Mexico, has been appointed administrator of General Hospital in Louisville.



Medicare was the chief topic of conversation when Robert W. Robertson, M. D., Paducah, KSMA president-elect; Major General Paul I. Robinson, Washington, D. C., executive director of the Medicare program; and Robert C. Long, M. D., Louisville, chairman of the KSMA Medicare Committee, got together at the County Society Officers Conference.

Hospital Assoc. Elects Officers at Meeting in Louisville

Wade Mountz, who became administrator of Norton Memorial Infirmary in March, was named president-elect of the Kentucky Hospital Association at a business session during the Association's annual convention at the Sheraton-Seelbach Hotel in Louisville on April 15, 16, and 17.

He will become president next year, succeeding Walter Chestnut, administrator of District One State TB Hospital who is now president. E. W. Horgen, administrator King's Daughters' Hospital, Ashland, is treasurer. Retiring president is W. S. Murphy, Good Samaritan Hospital, Lexington.

During the meeting, Arden E. Hardgrove, former administrator at Norton's received the Association's Distinguished Service Award in recognition of "service in hospital administration on the national, state, and local levels."

UK $600,000 Pharmacy Building Dedicated April 2

The University of Kentucky's new $600,000 College of Pharmacy Building in Lexington was dedicated at ceremonies on April 2, which were attended by J. Farra Van Meter, M.D., Councilor for the 10th District, representing KSMA President Edward B. Mersch, M.D., Covington.

Principal speaker at the dedication luncheon was Dr. Richard Deno, professor of pharmacognosy at the University of Michigan's College of Pharmacy. In his address he predicted that in the years ahead, careers in pharmacy would "offer great—almost limitless—opportunities."

Following the luncheon, U of K President Frank Dickey accepted a gold key to the building from Dr. Earl P. Slone, dean of the College of Pharmacy. The college moved into the new building from its former location in Louisville last year.

KSMA Council Plans Open Meeting in Louisville on July 31

The Council of the KSMA will have an open meeting Thursday, July 31, in the South Room of the Brown Hotel, its chairman, Walter L. O'Nan, M. D., Henderson, has announced.

At its 1957 meeting, the KSMA House of Delegates accepted the recommendation of 1957 president Richard R. Slucher, M. D., Buechel, pointing out the advantages of having at least one open meeting of the council each year.

Doctor O'Nan stated that Doctor Slucher's suggestion had met with the approval of members of the Council and invited all KSMA members who have an interest in this meeting to attend.

Federal Disability Insurance Rules Explained for KSMA Members*

The 1956 Amendments to the Social Security law provide for payment of disability insurance benefits to severely disabled workers between the ages of 50 and 65. Payments were first possible beginning with the month of July 1957. The amount of the disability benefit depends on the worker's average earnings in work covered by the Social Security Act, and it is the same as the old-age insurance benefit would be if the worker had reached retirement age at the time he became disabled. Dependents of a disabled worker are not eligible for benefits. His dependents may, however, be eligible for benefits when the worker reaches retirement age or if the worker should die.

To qualify for disability insurance benefits, a worker must have social security credits for at least 5 years' work in the 10 years before the beginning of his disability, and at least 1½ years of this work must have been in the 3 years just before he became disabled.

Although disability insurance benefits were not included in the law until the 1956 amendments, there has been a "disability freeze" provision in the law since 1954. The disability freeze provision is a way of protecting a disabled person's social security earnings account so that the period when he is unable to work because of his disability will not be counted against him in figuring the benefits due him and his dependents when he reaches retirement age or the benefits due to his family in case of death. This provision applies to workers of any age.

The work requirements for the disability freeze and for disability insurance benefits are approximately the same.

Hugh A. McNary, Jr., Louisville,
District Manager
Social Security Administration

**This is the first of three articles which will appear in succeeding issues of the Journal. They are being used at the suggestion of the KSMA Committee on Medical Education and Economics to provide members with more information on handling social security claims of their patients.*



Discussing the changing patterns in rural health at the National Conference on Rural Health in Jackson, Mississippi in March were, Wyatt Norvell, M. D., chairman of the KSMA Committee on Rural Health, and J. P. Culpepper, Hattiesburg, Mississippi, past president of the Southern and Mississippi medical associations and a delegate to the AMA. Doctor Norvell was featured on the program.

66 Ky. Hospitals Accredited by Joint Commission

Sixty-six Kentucky hospitals are listed by the Joint Commission on Accreditation of Hospitals as accredited as of December 31, 1957.

According to Kenneth B. Babcock, M. D., Director of the Joint Commission, the omission of a hospital from this list does not necessarily mean that the hospital fails to meet the Standards of the Joint Commission. Hospitals with less than 25 beds are not eligible for accreditation and only those hospitals which request a survey are visited.

Ashland
District Four State TB Hospital
King's Daughters' Hospital
Our Lady of Bellefonte Hospital

Berea
Berea College Hospital

Bowling Green
Bowling Green-Warren County Hospital

Corbin
Southeastern Kentucky Baptist Hospital

Covington
St. Elizabeth Hospital
Wm. Booth Memorial Hospital

Danville
Ephraim McDowell Memorial Hospital

Dayton
Speers Memorial Hospital

Elizabethtown
Hardin Memorial Hospital

Fort Thomas
St. Luke Hospital of Campbell County

Frankfort
King's Daughters' Hospital

Glasgow
District Six State TB Hospital
T. J. Samson Community Hospital

Greenville
Muhlenberg Community Hospital

Harlan
Harlan Memorial Hospital

Hazard
Hazard Memorial Hospital
Mount Mary Hospital

Henderson
Methodist Hospital in Henderson

Hopkinsville
Jennie Stuart Memorial Hospital

Jenkins
Sharon Heights Hospital

Lexington
Central Baptist Hospital
Good Samaritan Hospital
St. Joseph Hospital
Shriners Hospital for Crippled Children

London
District Five TB Hospital
Marymount Hospital

Louisville
Children's Hospital
District Two State TB Hospital
Jewish Hospital
Kentucky Baptist Hospital
Kosair Crippled Children Hospital
Louisville General Hospital
Norton Memorial Infirmary
Our Lady of Peace Hospital
Red Cross Hospital
St. Anthony Hospital
St. Joseph Hospital
SS. Mary and Elizabeth Hospital

Lynch
Notre Dame Hospital

Madisonville
District One State TB Hospital
Hopkins County Hospital

Martin
Our Lady of the Way Hospital

Maysville
Hayswood Hospital

McDowell
McDowell Memorial Hospital

Middlesboro
Middlesboro Memorial Hospital

Murray
Murray Hospital Association

Owensboro
Our Lady of Mercy Hospital
Owensboro-Daviess County Hospital

Paducah
Riverside Hospital
Western Baptist Hospital

Paintsville
Paintsville Clinic
Paintsville Hospital

Paris
Bourbon County Hospital
District Three State TB Hospital

Pikeville
Methodist Hospital of Kentucky
Pikeville Memorial Hospital

Pineville
Pineville Community Hospital Association

Prestonsburg
Prestonsburg General Hospital
Russellville
Logan County Hospital
Scottsville
Allen County War Memorial Hospital
Shelbyville
King's Daughters Hospital
Waverly Hills
Waverly Hills TB Sanatorium
Whitesburg
Whitesburg Memorial Hospital
Winchester
Clark County Hospital Association

Equipment for CD Hospitals Stored in Ky. Communities

Equipment for federal civil defense emergency hospitals has been stored in various small communities throughout the state, according to J. Clifford Todd, Health Analyst, Division of Civil Defense.

Purpose of these stored hospitals is to take care of evacuees from larger cities, which in the event of enemy attack would be possible target areas. The hospitals include operating tables, anesthetics, cots, and other material which could be set up in the event of an emergency of a civil defense nature or a local disaster, such as a tornado or explosion.

A hospital is now stored in Nazareth, Bardstown, Falmouth, and Maysville and plans call for one in Harrodsburg in the near future. There are two hospitals in Danville and Springfield. Seven will be stored in Fayette County at the Avon Plant.

Current plans call for a CD hospital to be set up in Louisville for training purposes.

KDA Annual Meeting in Louisville Attended by 1800

Nearly 1800 dentists, wives, dental assistants, and hygienists from throughout the state attended the 98th annual meeting of the Kentucky Dental Association at the Brown Hotel in Louisville on March 23, 24, 25, and 26.

Doctor Percy T. Philips, New York, president-elect of the American Dental Association was the luncheon speaker at the Monday session. Among the well known dental specialists featured as speakers was Colonel Robert B. Shira, chief of oral surgery at Walter Reed Hospital, Washington, D. C., whose name appeared in the news recently when he extracted an upper left molar from President Eisenhower.

Marion F. Beard, M. D., Louisville, was on the program discussing "Abnormal Bleeding and the Dental Patient."

Newly elected officers include: Frank Jordan, Louisville, president-elect; Joe Bustetter, Louisville, 1st Vice President; Paul Evans, Ashland, 2nd Vice President; James Skaggs, Louisville, 3rd Vice President. A. B. Coxwell, Louisville, is secretary-treasurer.

The ladies' auxiliary, the dental assistants' and the dental hygienists' associations held meetings in conjunction with the KDA meeting. The KDA House of Delegates met on the 23rd.



Dr. Frank Jordon (left), Louisville, president elect of the Kentucky Dental Association, received congratulations from Association President Dr. Lyman E. Wagers, Lexington, at the 98th Annual KDA Meeting in Louisville.

Loan Fund Set Up to Aid Students at U of K Med School

A loan fund in honor of the late Jack Webb, M.D., Lexington, has been set up for students in the University of Kentucky's College of Medicine by the Samuel Brown Journal Club—a society of Lexington physicians.

An initial check for $500 has been presented to the Kentucky Research Foundation. The Fund will be known as the Dr. Jack Webb Memorial Fund and was started with donations from club members and money sent to the Fayette County Medical Society in Doctor Webb's memory.

As the total fund grows, it may be used to provide scholarships for deserving students at the college of medicine, or may be invested and returns used for loan and scholarship purposes.

Drs. Kinsman, Ackerly Speak at ACP

Two Louisvillians, Murray Kinsman, M. D., and S. Spafford Ackerly, M. D., were on the program of the 38th Annual Session of the American College of Physicians in Atlantic City, New Jersey, on April 28-May 2.

Doctor Kinsman, dean of the University of Louisville School of Medicine, was presiding officer of the "Symposium on Aeromedical Aspects of Space Flight." Doctor Ackerly, was a participant in a "Symposium on Practical Psychotherapy" and had as his topic, "Psychotherapy in General Hospitals."

Joint Meeting Held in Glasgow

Oren A. Beatty, M.D., Hazelwood Sanatorium, Louisville, and Walter H. Griffing, M.D., Bowling Green, presented scientific papers at the joint meeting of the Sixth Councilor District and District Six State TB Hospital in Glasgow on April 9.

Following the scientific presentations Harold Keen, M.D., secretary of the Sixth District, announced that a joint meeting with the Fourth District was being planned for June 12 at Mammoth Cave Hotel.



District Councilors got together with guest speakers at the Harrodsburg Seminar on April 3. Seated are: W. Keith Crume, M.D., Bardstown, Councilor for the 4th District; and Garnett J. Sweeney, M.D., Councilor for the 12th District. Standing are: Douglas M. Haynes, M.D., William T. Rumage, M.D., Joseph A. Little, M.D., and Malcolm Stanley, M.D., all of Louisville, who were featured on the scientific portion of the program.

Harrodsburg Seminar in April Attended by 60

Sixty Kentucky physicians and their wives attended the third annual postgraduate seminar at the Beaumont Inn, Harrodsburg, on April 3, according to Garnett J. Sweeney, M.D., Councilor for the 12th District, who presided.

Four members of the University of Louisville faculty were featured on the scientific program arranged by the KSMA Committee on Postgraduate Medical Education. They were: Douglas M. Haynes, M.D., Joseph A. Little, M.D., William T. Rumage, M.D., and Malcolm Stanley, M.D.

A dinner and social hour were included in the seminar which is part of the KSMA sponsored program of postgraduate medical education for Kentucky physicians. Other sponsors of the program were the University of Louisville School of Medicine and the Kentucky Academy of General Practice.

Proctologic Society Meets May 9-10

Two Louisville physicians—Joseph Hamilton, M.D., and George F. McAuliffe, M.D.,—will give papers at the annual meeting of the Ohio Valley Proctologic Society at the French Lick-Sheraton Hotel on May 9 and 10, according to James E. Ryan, M.D., Louisville, vice president of the Society.

Doctor McAuliffe will discuss "Pruritus Ani and Anal Dermatoses" on Friday evening and Doctor Hamilton, "Surgical Rehabilitation in Ulcerative Colitis," on Saturday morning. Michael Deddish, M.D., New York will discuss "The Significance of Mucosal Polyps" on Friday evening.

UK Med School Delays Opening

"Because of the many complex factors associated with the creation and activation of a teaching medical center," the University of Kentucky will not open its medical school until the fall of 1960, it was announced by William R. Willard, M.D., vice president of the Medical Center.

The tentative opening was originally planned for September, 1959. "By deferring the activation date until 1960, we expect to be able to accept a larger class of students who will be able to work in buildings which have been completed and with faculty who have had an adequate time for the careful preparation of all aspects of the teaching program," Doctor Willard said.

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*in depressing gastric secretory volume and in inhibiting gastrointestinal motility."**

"Our findings were documented by an intensive and personal observation of these patients over a 2-year period in private practice. and in two large hospital clinics with close supervision and satisfactory follow-up studies."*

Among the many clinical indications for Pro-Banthīne (brand of propantheline bromide), peptic ulcer is primary. During treatment, Pro-Banthīne has been shown repeatedly to be a most valuable agent when used in conjunction with diet, antacids and essential psychotherapy.

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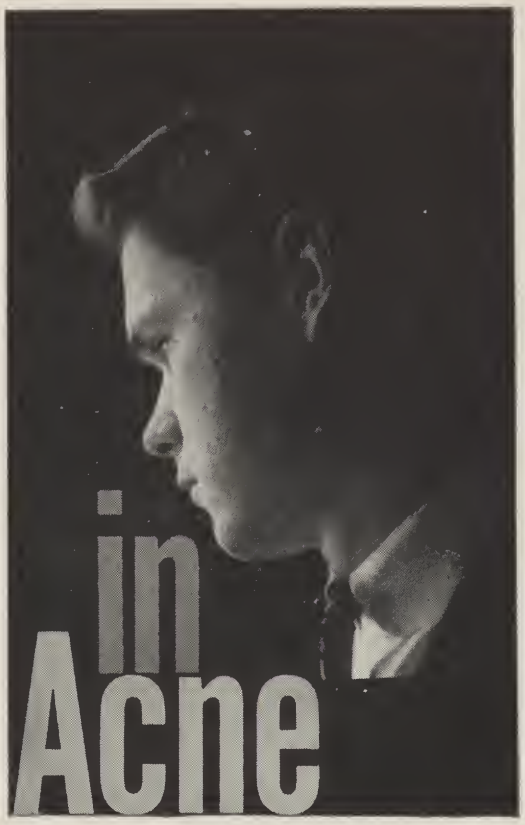
The average adult oral dosage of Pro-Banthīne is one tablet (15 mg.) with meals and two tablets at bedtime.

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———

*Lichstein, J.; Morehouse, M. G., and Osmon, K. L.: Pro-Banthīne in the Treatment of Peptic Ulcer. A Clinical Evaluation with Gastric Secretory, Motility and Gastroscopic Studies. Report of 60 Cases, Am. J. M. Sc. *232*:156 (Aug.) 1956.

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pHisoHex maintains normal skin pH, cleans and degerms better than soap. In acne, it removes oil and virtually all skin bacteria *without scrubbing.*

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1. Hodges, F. T.: *GP* 14:86, Nov., 1956.

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Woman's Auxiliaries Honor M. D.'s on Doctor's Day

The woman's auxiliaries of the various county medical societies honored physicians throughout the state on Doctor's Day—the day set aside to honor physicians.

The day is usually celebrated on or around March 30 in commemoration of the first use of ether as an anesthetic agent in a surgical operation by Crawford W. Long, M. D., Georgia on that date, according to Mrs. J. Andrew Bowen, Louisville, president of the KSMA Woman's Auxiliary.

Many county auxiliaries provided red carnations—symbolic of the day—for each doctor's buttonhole and placed bouquets of red carnations in hospitals and clinics. In Clark County, the woman's auxiliary entertained the physicians with a dinner at the Winchester Country Club. The auxiliaries of the Johnson, Magoffin, and Floyd counties feted their physicians with a luncheon at the Paintsville Country Club.

In Daviess County, coffee was served to all physicians at the nurses home in Owensboro. Prescription for Jefferson County M.D.'s on the night preceding their Doctor's Day was a celebration, including dinner and dancing at the Pendennis Club, sponsored by their woman's auxiliary.

To bring the good works of physicians to the attention of its readers on Doctor's Day, the Paducah Sun Times devoted a full page to a feature story on the careers of the Futrell twins, Doctor Elias and Doctor John, who have practiced in Cadiz for more than a quarter of a century.

Mrs. Bowen said that it is hoped that in the future Doctor's Day will become even more of a tribute to M.D.'s and that newspapers will increasingly bring to the public's attention the services rendered by its physicians.

Ky. Pediatric Society Elects

Caroline Scott, M.D., of Lexington, was elected president of the Kentucky Pediatric Society at its annual meeting in Louisville on April 10. She succeeds Owen S. Ogden, M.D., Louisville.

Other newly elected officers are Carolyn McKinley, M.D., Glasgow, vice president and Howard Ripy, M.D., Lexington, secretary-treasurer.

"Health Careers" Booklet Published

A booklet on "Health Careers," designed to help the high school student to choose a future profession, has recently been published by the Health Careers Committee of the Health Division, Health and Welfare Council of Louisville and Jefferson County.

The committee is made up of representatives of 41 organizations and has Harry Lehman, executive secretary of the Jefferson County Medical Society, as its chairman. Included in the booklet are: a description of various health jobs, the education needed, the opportunities offered, the salary range, and sources of information on a particular type of work.

Arthur W. Allen, M.D., Dies in Boston Hospital

Arthur W. Allen, M.D., a native Kentuckian and an internationally known surgeon, died in Massachusetts General Hospital Boston on March 17 after an illness of 10 days.



A guest speaker at the KSMA Centennial Meeting in 1951 and before the Kentucky Surgical Society, Doctor Allen was born in McKinney, Kentucky in 1887, received his A.B. degree from Georgetown College, Georgetown, Kentucky in 1909 and his M.D. from Johns Hopkins University School of Medicine in 1913.

He was a past president of the American College of Surgeons, the Massachusetts Medical Society, the Boston Surgical Society, and past chairman of the surgical section of the American Medical Association, and of the U. S. committee of the International Society of Surgery.

Notice to Former Grady House Staff

An organization composed of all former members of the House staff of Grady Memorial Hospital in Atlanta is being formed. Plans are now being made for the first annual meeting in the fall. Two years ago letters were sent to all known former House officers, however, many were not included because of an incomplete mailing list. If you did not receive one of these notices, or failed to reply, please notify: Grady Hospital Clinical Society, Office: G-610, 80 Butler St. S. E., Atlanta, Georgia.

AMA Announces New Exhibits

The AMA Bureau of Exhibits has announced a number of new exhibits which will be ready for showings by local medical societies at fairs, home shows, school and similar public showings this spring and summer.

New exhibits include: You Can Reduce, Food and Nutrition Quackery, Breathing, Glands, Poisoning of Children, and Health Appraisal of the School Child. For full information contact KSMA Headquarters Office, 1169 Eastern Parkway, Louisville 17.

Medical School Gets Veterinarian

Dr. Alden E. Stilson, Jr., a veterinarian, recently began his duties as supervisor of animal welfare at the University of Louisville Medical School. His salary is paid by the Animal Welfare Committee. In addition to being responsible for the well being of all laboratory animals, he will serve as a consultant to faculty members and students undertaking animal research.

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SIGN OF GOOD TASTE

67 at Tri-City Ob. Gyn. Meet

Sixty-seven physicians from Louisville, Indianapolis and Cincinnati attended the meeting of the Tri-City Obstetrical and Gynecological Society in Louisville on March 26, according to Robert C. Long, M.D., who heads the Louisville group.

Michael L. Leventhal, M.D., Chicago, noted for his work on the Stein-Leventhal Syndrome, spoke at both the afternoon session at the University of Louisville School of Medicine and the dinner that night at the Audubon Country Club.

Jefferson Co. to Help Indigent

The Jefferson County Medical Society is cooperating with the Travelers' Aid Society to provide medical care for indigent cases that do not meet the requirements for regular city-county welfare aid at General Hospital.

Four physicians have been designated by the county society to cooperate with the Aid society in providing medical care. The are: Rudy Vogt, M.D., obstetrics and gynecology; Austin Bloch, M.D., general medicine; Harry Hardegree, M.D., surgery; and Carroll Witten, pediatric cases.

Dr. Esham Appointed Regent

Elwood Esham, M.D., Vanceburg, was appointed a regent for Morehead State College by Governor A. B. Chandler. Other physicians who are Morehead regents are: Paul B. Hall, M.D., Paintsville, and W. H. Cartmell, M.D., Maysville.

Nineteen Added to KSMA Roster

New additions to KSMA membership since the last issue of the Journal include:

R. M. Beaven, M.D., Russellville
James Callis, M. D., Owensboro
Eugene A. Castle, M. D., Middlesboro
W. F. Chumley, M. D., Hartford
William Clause, M. D., Richmond
David C. Colvin, M. D., Elizabethtown
James W. Dorton, M. D., Louisa
Meredith J. Evans, M. D., Middlesboro
Mary P. Fox, M. D., Pineville
Frank W. Hastings, M.D., Harlan
Kenneth P. Haywood, Madisonville
William B. Hilbun, M. D., Jamestown
A. B. Jones, M. D., Middlesboro
Dorothy T. Magallon, M. D., Louisville
Merle D. Napier, M. D., Munfordville
M. David Orrahood, M. D., Owensboro
Charles E. Peck, M. D., Russell Springs
Albert W. Shiflet, M. D., Harlan
Joseph W. Stein, M. D., Bowling Green

Hospital Committee Appointed

Governor A. B. Chandler recently appointed three members of the Kentucky Advisory Council in the Division of Medical Hospitals and Related Services. Donald H. Putnam, Ashland, was appointed to a four year term. Reappointed for four year terms were: William W. Willard, Lexington, and State Revenue Commissioner J. E. Luckett, Frankfort.

AMGA Tourney in Calif., June 23

All golfing physicians are invited to participate in the annual golf tournament of the American Medical Golfing Association held in conjunction with the AMA Convention, June 23 at the Olympic Lakeside Golf and Country Club in San Francisco.

The day-long tourney will include golf, luncheon, banquet, and a prize for everyone. Tee off time is from 8 a.m. to 2 p.m. Handicaps are from scratch to 30 in flights. For information, contact James J. Leary, M. D., secretary, 450 Sutter Street, San Francisco, California.

County Society Reports

McCracken

Joe M. Chisholm, M.D., Memphis, Tennessee, spoke on "Melanocarcinoma" at the monthly meeting of the McCracken County Medical Society on February 26. W. Burton Haley, M.D., presided.

A group plan for business expense disability insurance was presented by Doctor Haley. He stated that if 50 per cent of the Society were issued individual policies under this plan, the premiums would be less expensive. Approval of this plan was given by the Society.

Leon Higdon, M.D., announced that arrangements had been made to present thirteen 15-minute programs on a weekly basis. The society approved providing funds for the printing of cards announcing this program and it was agreed that each member would mail them out with his monthly statements.

Doctor Higdon reported that a bill requiring free choice of physicians by patients had been introduced in both the House and the Senate.

The following resolution was introduced by Eugene L. Blake, M.D.: "Be it resolved that the motion regarding the furnishing of dinners to all members of the Society in good standing be rescinded and the following be adopted in lieu of the same: 'That dinners at all official meetings of the society be furnished at no charge to—1. All active members in good standing, 2. All associate members in good standing, 3. All inactive members in good standing, 4. All guest speakers.' " The motion passed.

It was decided that a $100 bond now in the Society's possession should be cashed and turned over to operating funds.

Doctor Blake officially introduced the new constitution and by-laws and went over two major changes in the present by-laws. One of these was for the establishment of an executive committee and a breakdown of various types of memberships as set up now by the State Society. Preliminary approval was given to these items. The Secretary announced that the Constitution and By-Laws would be mimeographed and mailed to all members of the Society 10 days before the next meeting. Members wishing to propose changes before the final adoption were asked to have these in writing at the next meeting.

Glenn R. Noss, M.D., chairman of the Health Clinic Committee, gave the Committee's recommendation that Judith Stout, M.D., present as a

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( ) **Professional Management Service**
( ) **Long-Term Financial Planning**
( ) **Tax Returns**
( ) **Other:**
( ) **Centralized Bookkeeping** (Statements to Patients)
( ) **Pre-Collection Program**
( ) **Partnership Formation**
( ) **Sale of Practice**
( ) **Collections**

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FACILITIES OFFERED—Each doctor will have his own waiting room, with public and private entrances, secretary's office, doctor's office, three examining rooms, test and sterilization room, storage, public and private toilets. Somerset City Hospital, with the new addition, is rated as 100 beds. The population of the town and suburbs is 15,000. The hospital serves a five county area. Somerset is a fine place to live. It adjoins Lake Cumberland which has excellent recreational facilities.

For further information contact C. K. Cundiff, Owner, Somerset, Ky. Phone 1229.

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Treating alcoholism and other problems of addiction.
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program at the next meeting a talk on the various functions of the Paducah and McCracken Health Committee. This was to be left to the discretion of the program committee.

Fulton

D. L. Jones, M. D., Fulton, was elected president of the Fulton County Medical Society at a dinner meeting of the group at the Park-Terrace Restaurant in March.

He succeeds M. W. Blankenship, Fulton, who filled out the unexpired term of the late J. G. Samuels, M. D., Hickman.

Other newly elected officers are: Glenn Bushart, M. D., Fulton, vice president; J. A. Poe, M. D., Fulton, secretary-treasurer; Ward Bushart, Fulton, delegate to the KSMA; and Russell Rudd, M. D., Fulton, alternate delegate to the KSMA.

The AMA's Committee on Toxicology has drafted a broad model law requiring precautionary labeling of hazardous substances in commercial, household, and industrial chemicals. The bill, which is part of an over-all program to prevent poisonings and to increase public awareness of the hazards of certain chemical products, is intended as a model for uniform laws requiring declaration of hazardous ingredients.

In Memoriam

Milus L. Gunn, M. D.
Harlan
1896-1958

Milus L. Gunn, M.D., died in a Pittsburg hotel of an acute myocardial infaction due to a coronary occlusion on April 5. He was returning home after a trip to Boston for treatment.

Doctor Gunn, a graduate of the University of Louisville School of Medicine in 1920, was certified by the American Board of Otolaryngology, was a member of the American Academy of Ophthalmology and Otolaryngology, and was a fellow of the American College of Surgeons. He did extensive postgraduate work in New York and Berlin, Germany and was attending surgeon at Sir Henry Holland's Eye Clinic in Shikapur, Pakistan in 1947.

Fount Richardson, M.D., Fayetteville, Arkansas, was elected President-Elect of the American Academy of General Practice at the 10th annual Scientific Assembly of the Academy in Dallas, Texas, on March 24-27.

AN IMPORTANT ADVANCE IN MENOPAUSAL THERAPY

Because it replaces *half* control with *full* control.

Because it treats the *whole* menopausal syndrome.

Because *one* prescription manages *both* the psychic and somatic symptoms.

SUPPLIED: Bottles of 60 tablets.
Each tablet contains:

MILTOWN® (meprobamate, Wallace) ..... **400 mg.**
2-methyl-2-*n*-propyl-1,3-propanediol dicarbamate.

Conjugated Estrogens (equine) ..... **0.4 mg.**

DOSAGE: One tablet t.i.d. in 21-day courses with one week rest periods. Should be adjusted to individual requirements.

Samples and literature on request.

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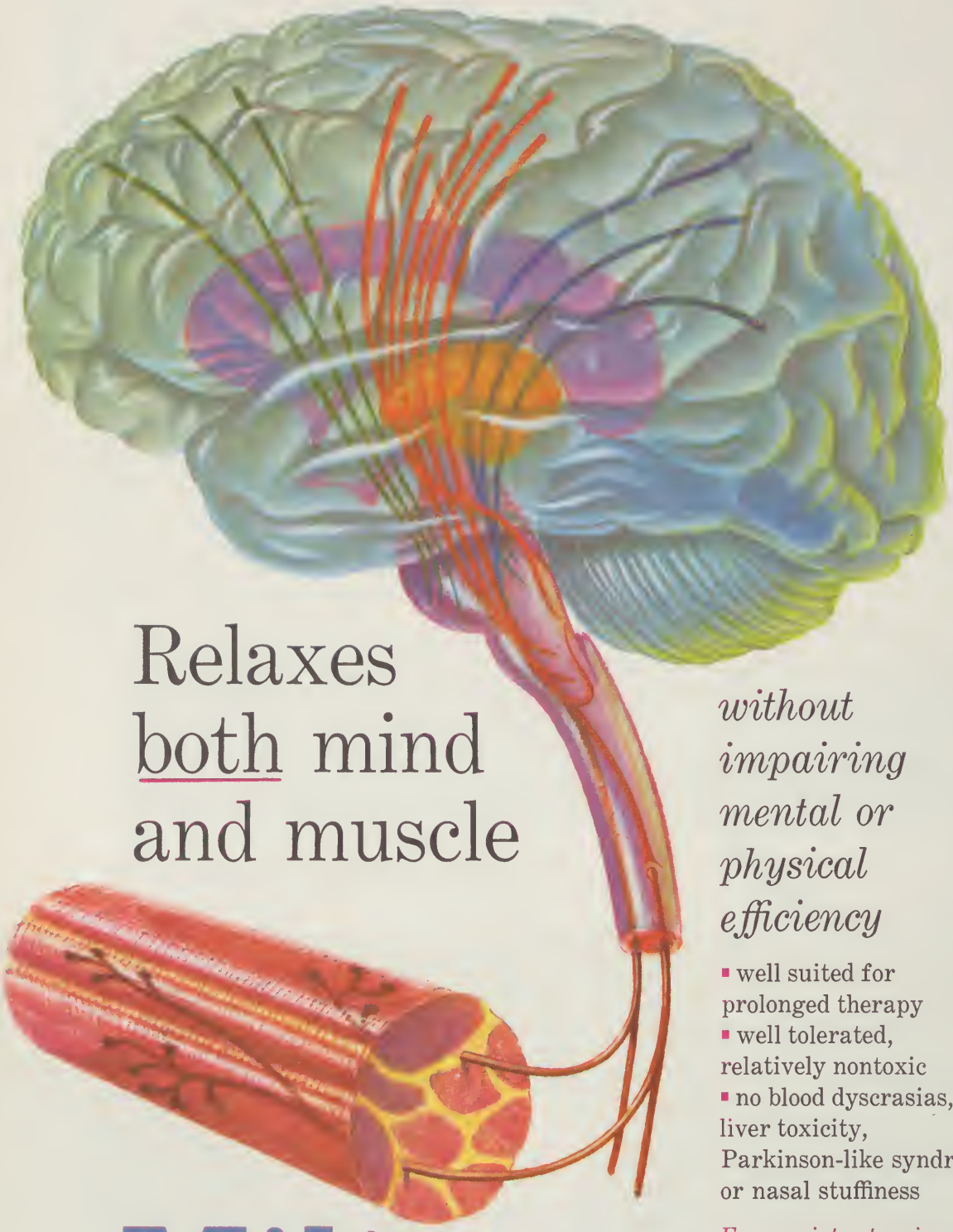
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without impairing mental or physical efficiency

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For anxiety, tension and muscle spasm in everyday practice.

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In The Books

(Continued from page 418)

planations, it is done in the same entertaining but educational fashion that avoids the oppression so often found with authentic and technical explanations.

The current interest of the medical profession in the field of accidental poisoning prevention has been aided immeasurably by the reports of a child who lost his life from the ingestion of acetylsalicylic acid. The basic function of poison control work is an educational one directed toward the medical, paramedical, and lay public. One of these educational aspects is clearly depicted by the narrative account of Reference Service of the New York City Poison Control Center.

The approach toward the problems of rabies is a unique but stimulating one. Mr. Roueche brings the very real increase in the number of rabies infected bats squarely into focus. In so doing specific lives may be saved.

The problems of industrial health are cleverly intertwined with the responsible role and philosophical approach of the employer and the authorized supervising body.

The reader finds himself checking his own surroundings for possible indicated improvements.

As the volume of medical literature increases there is an increase in both poorly and well written material. Reporters of Mr. Roueche's caliber can only improve the medical writings of the future.

William Curtis Adams, M. D.

Special Article—Freedom

(Continued from page 462)

where as rapidly as possible. This was the case in England, Switzerland, Sweden and Germany, and might well have been the case here. Let us unite our constant efforts to retain our traditional freedom. Our crusade has largely been successful so far. There is little or no doubt that the formation and growth of the companion Blue Cross and Blue Shield Plans prevented government control. Some happy optimist said of the British Empire that they never won any battle but the last. It would be fatal for us to assume this philosophy. Once the battle is lost in this essential controversy the war is irrevocably lost.

The University of Southern California School of Medi-cine will offer a postgraduate refresher course to be held in Hawaii and aboard the S. S. Matsonia from August 5-21. The course will take place weekday mornings from 9 a.m. to 12 noon, leaving the afternoons, evenings and weekends free. In order that each physician may have the opportunity to choose the subjects which will be most valuable to him, several programs will be given simultaneously. All KSMA members are invited to attend. Information concerning this course may be obtained from the Director of the Postgraduate Division, USC School of Medicine, 2025 Zonal Avenue, Los Angeles 33, California.

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NEWS ITEMS

J. Duffy Hancock, M.D., was recently elected chairman of the Bellarmine College Board of Overseers succeeding T. V. Hartnett.

George E. Wakerlin, M.D., a professor at the University of Louisville School of Medicine from 1931 to 1937, has been appointed medical director of the American Heart Association in New York City.

Charles Philip Bartley, M.D., a graduate of the University of Louisville School of Medicine in 1949, is a resident in orthopedics at Veterans Administration Hospital in Louisville. He interned at St. Joseph's Hospital in Phoenix, Arizona in 1950 and took residency training at Kosair Crippled Hospital in Louisville before going to the VA Hospital.

O. D. Sparks, Jr., M. D., has opened an office in Paintsville for the practice of medicine and surgery. A graduate of the University of Louisville School of Medicine in 1942, he served his internship at St. Elizabeth's Hospital in Covington. He practiced at Van Lear until he entered the Armed Services in 1943. He took residency training at the Hazard Hospital and Mount Mary Hospital. He has practiced in London, Somerset, and Fleming.

Joseph J. Lee, M. D., has opened an office in Louisville and Shively for the practice of obstetrics and gynecology. A graduate of the University of Louisville School of Medicine in 1950, he interned at Newark City Hospital in New Jersey. He took one year residency in internal medicine at the Veterans Administration Hospital in Coral Gables, Florida and then practiced general medicine in Morristown, New Jersey for 2½ years. He has been taking a residency in obstetrics and gynecology at Louisville General Hospital.

Somerset physicians competed with local nurses in the annual basketball game called the "Liniment Derby" for the benefit of the Nurses Scholarship Fund in March. Physicians on the 16-man team were: **Robert McLeod, Leslie Langley, Morris Holtzclaw, Richard Weddle, Jack Hill, A. B. Morgan, McLeod Patterson, E. T. Smith, E. R. Smith, William Harris, B. E. King, John Shearer, B. L. Ramsey, Sidney Edds, R. B. Jasper, and R. F. Long.**

A cancer public speaking contest sponsored by the **Woman's Auxiliary of the Kentucky State Medical Association,** the University of Kentucky College of Adult and Extension Education, and the Kentucky Division of the American Cancer Society, was held on the UK Campus on March 24. Physician judges included: **W. Porter Mayo, M.D., Arnold Combs, M.D., and W. W. Lykins, M.D.,** Lexington. Participants were entertained in the homes of members of the Fayette County Medical Society.

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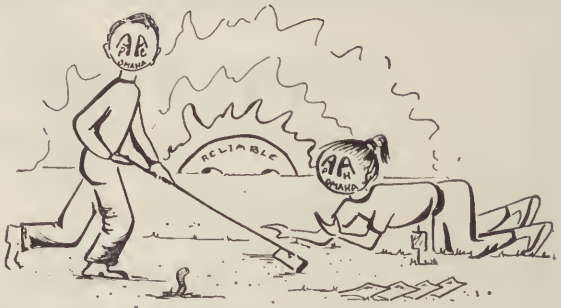
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1958 Annual Meeting — Kentucky State Medical Association

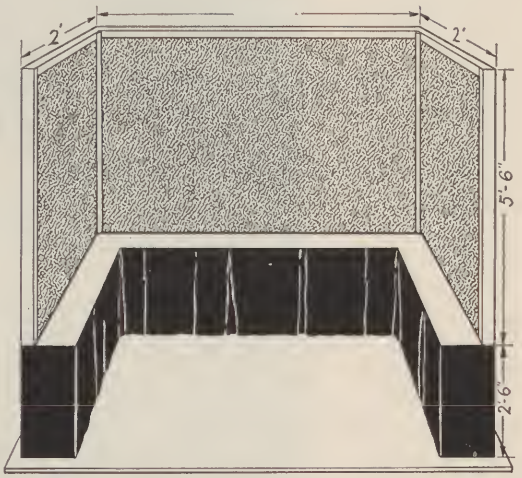
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Fill Out and Mail to:

EVERETT L. PIRKEY, M.D., Chairman
Committee on Scientific Exhibits
Louisville General Hospital,
Louisville 2, Kentucky

Applications for space should be received before July 1, 1958

Dimensions and structure of K.S.M.A. Scientific booth are shown in accompanying illustration



1. Title of Exhibit: .....

2. Description or nature of exhibit: (Attach brief description to this blank).

3. Will you require shelf space? .....

4. Give approximate amount of wall space needed. (Included in total space is two side walls of two feet in length) .....

5. Name of institution co-operating in the exhibit (if desired) .....

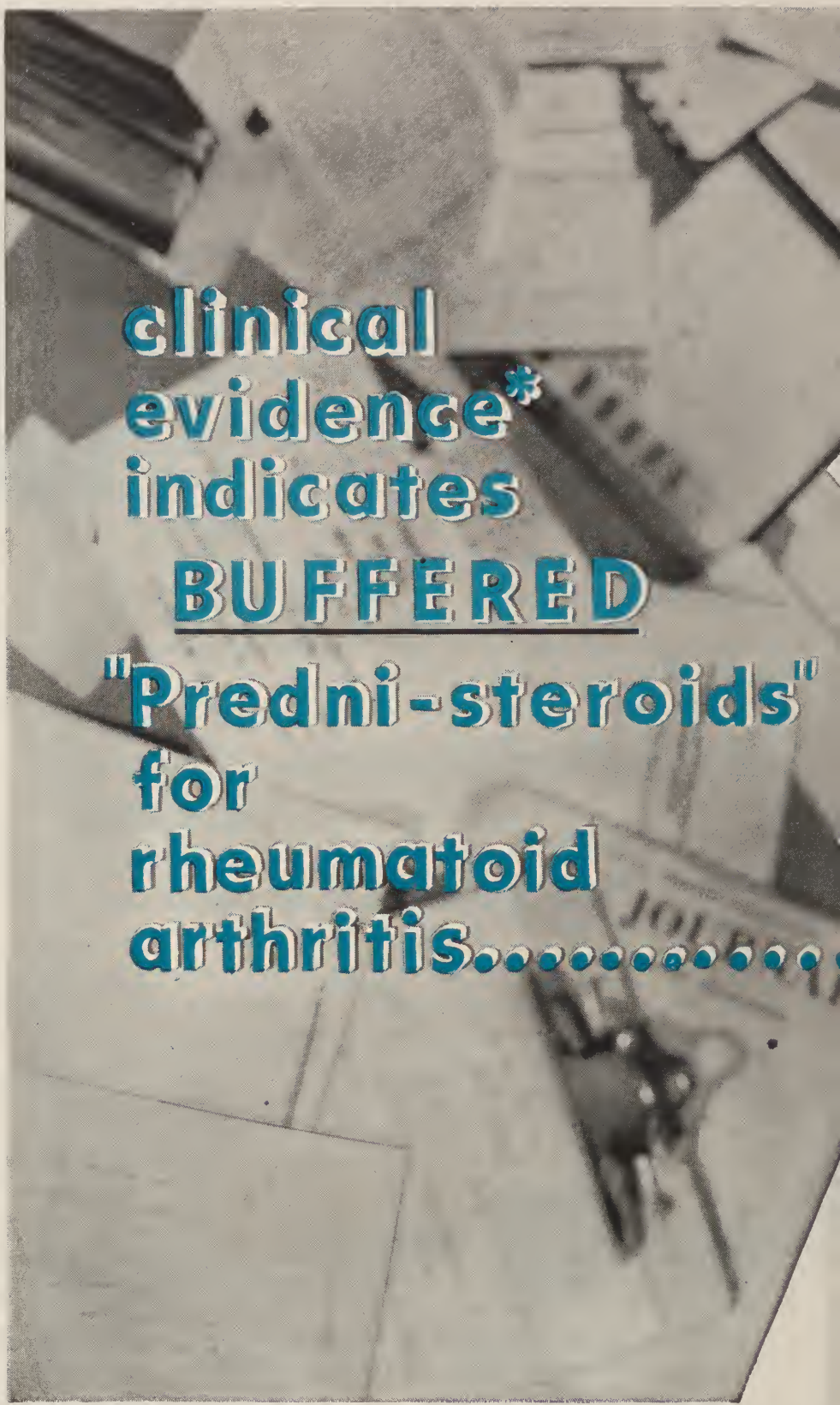
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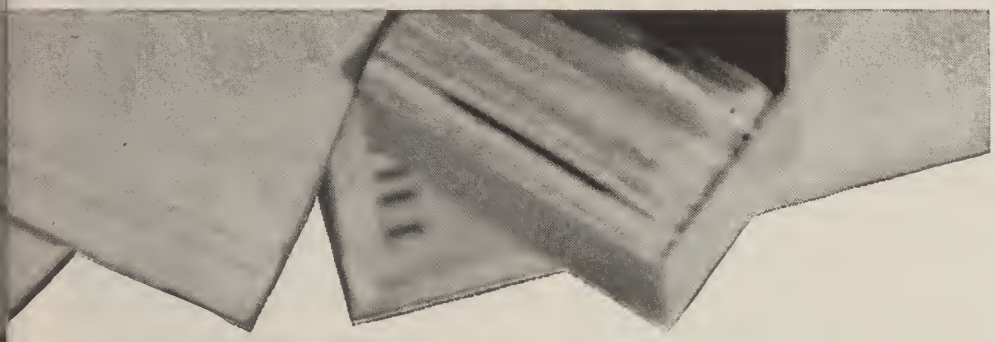
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The Kentucky State Medical Association will provide without cost to the exhibitor the following: Exhibit space, shelves, sign for booth, current, bracket lights, provided all items are approved in advance by the committee.

Cost of transporting exhibits to the meeting must be borne by the individual exhibitor as well as costs of cards, signs, etc., which are a part of the exhibit.

View boxes, furniture, decorations, etc., may be rented, if desired, by applying directly to Jos. T. Griffin Company, 704 West Main Street, Louisville 2, who supply equipment for the annual K.S.M.A. meeting.


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Gastric distress accompanying "predni-steroid" therapy is a definite clinical problem—well documented in a growing body of literature.

view of the beneficial re-
s observed when antacids
nd diets were used concom-
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we feel that these measures
be employed prophylacti-
offset any gastrointestinal
cts."—Dordick, J. R. *et al.*:
ate J. Med. 57:2049 (June
7.

*"It is our growing conviction that all patients receiving oral steroids should take each dose after food or with adequate buffering with aluminum or magnesium hydroxide preparations."—Sigler, J. W. and Ensign, D. C.: J. Kentucky State M. A. 54:771 (Sept.) 1956.

*"The apparent high incidence of this serious [gastric] side effect in patients receiving prednisone or prednisolone suggests the advisability of routine co-administration of an aluminum hydroxide gel."—Bollet, A. J. and Bunim, J. J.: J. A. M. A. 158:459 (June 11) 1955.

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PERTINENT PARAGRAPHS

A catalog listing 87 medical films from the AMA library suitable for showing to medical societies, hospital staff meetings and other scientific groups may be obtained by contacting the KSMA Headquarters Office, 1169 Eastern Parkway, Louisville 17. The catalog also includes 57 health films of interest to physicians who may be called upon to speak before lay audiences such as service organizations and parent teachers association. Orders for the films may also be placed through the KSMA Headquarters Office.

The American College of Gastroenterology has announced its annual course in Postgraduate Gastroenterology will be given at the Jung Hotel in New Orleans, on October 23, 24, and 25. The course will again be under the direction and co-chairmanship of Owen Wagensteen, M. D., Professor of Surgery of the University of Minnesota Medical School, who will serve as surgical coordinator and I. Snapper, M. D., Director of Medical Education, Beth-El Hospital, Brooklyn, N. Y., who will serve as medical coordinator. Advances in diagnosis and treatment of gastrointestinal diseases will be covered.

The ninth annual "Reviews of Medical Motion Pictures," containing all reviews of films published in the Journal of the AMA is now available in the AMA film library. Copies may be obtained by contacting the KSMA Headquarters Office, 1169 Eastern Parkway, Louisville 17.

The Minnesota United Nations Association will present the Ninth Seminar on the World Health Organization in Minneapolis from May 26 through June 4, simultaneously with the Eleventh World Health Assembly. The seminar is sponsored by the World Federation of United Nations Associations directly from its headquarters in Geneva, Switzerland. The Seminar will be held in the Auditorium of the Lutheran Brotherhood Building three blocks from the Leamington Hotel where the WHA Commission will meet.

All physicians are cordially invited to attend the Seventh Annual Symposium for General Practitioners on Tuberculosis and Other Chronic Pulmonary Diseases at Saranac Lake, New York, July 7-11. Sessions will be held at the various sanatoria and laboratories in the Saranac Lake area. Registration fee for this five day symposium is $50. Sponsors are the American Trudeau Society, Saranac Lake Medical Society, and the Adirondack Counties Chapter of the New York State Academy of General Practice. For more information write P. O. Box 627, Saranac Lake, New York.

Four Paducah physicians furnished one of the comic highlights of "Needles and Splints" Riverside Hospital Auxiliary show on April 10-11. **Doctors Winfred Stryker, Rex Holland, Robert Woolridge and Burton Haley** combined their talents in a pantomime to the song, "It Only Hurts for a Little While."

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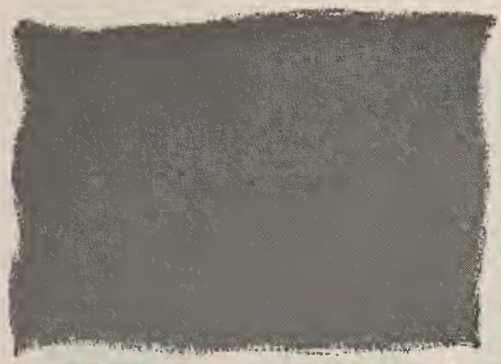
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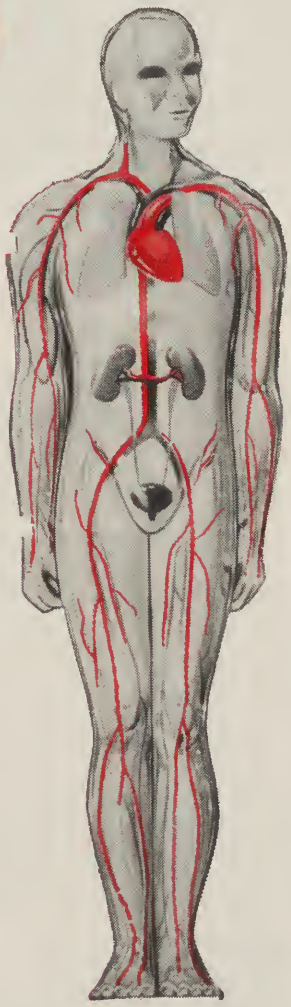
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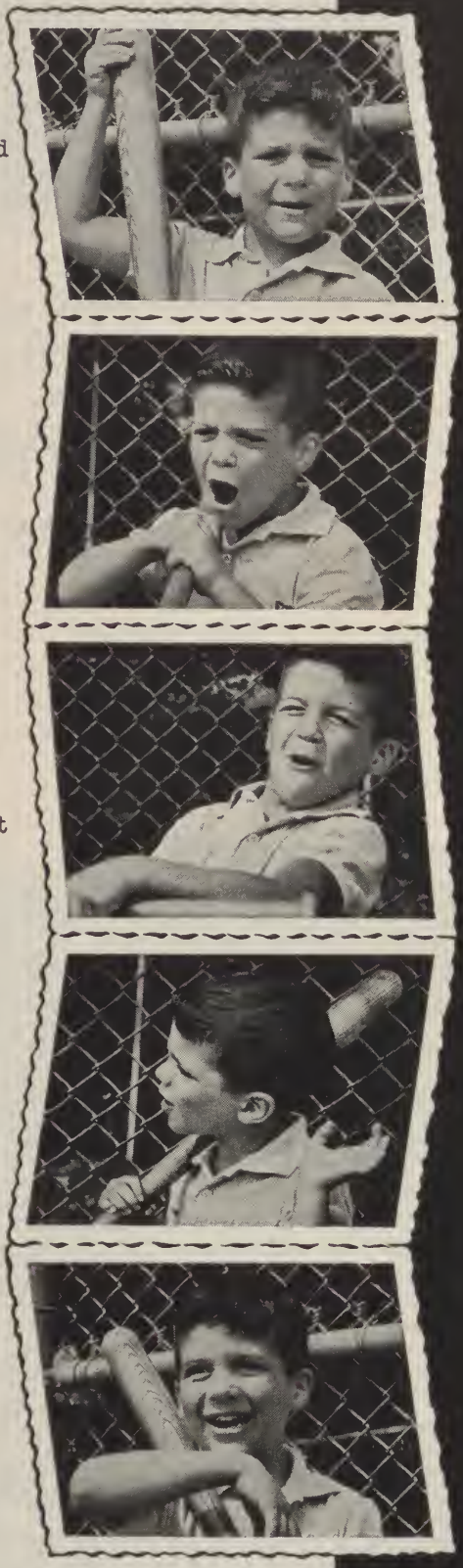
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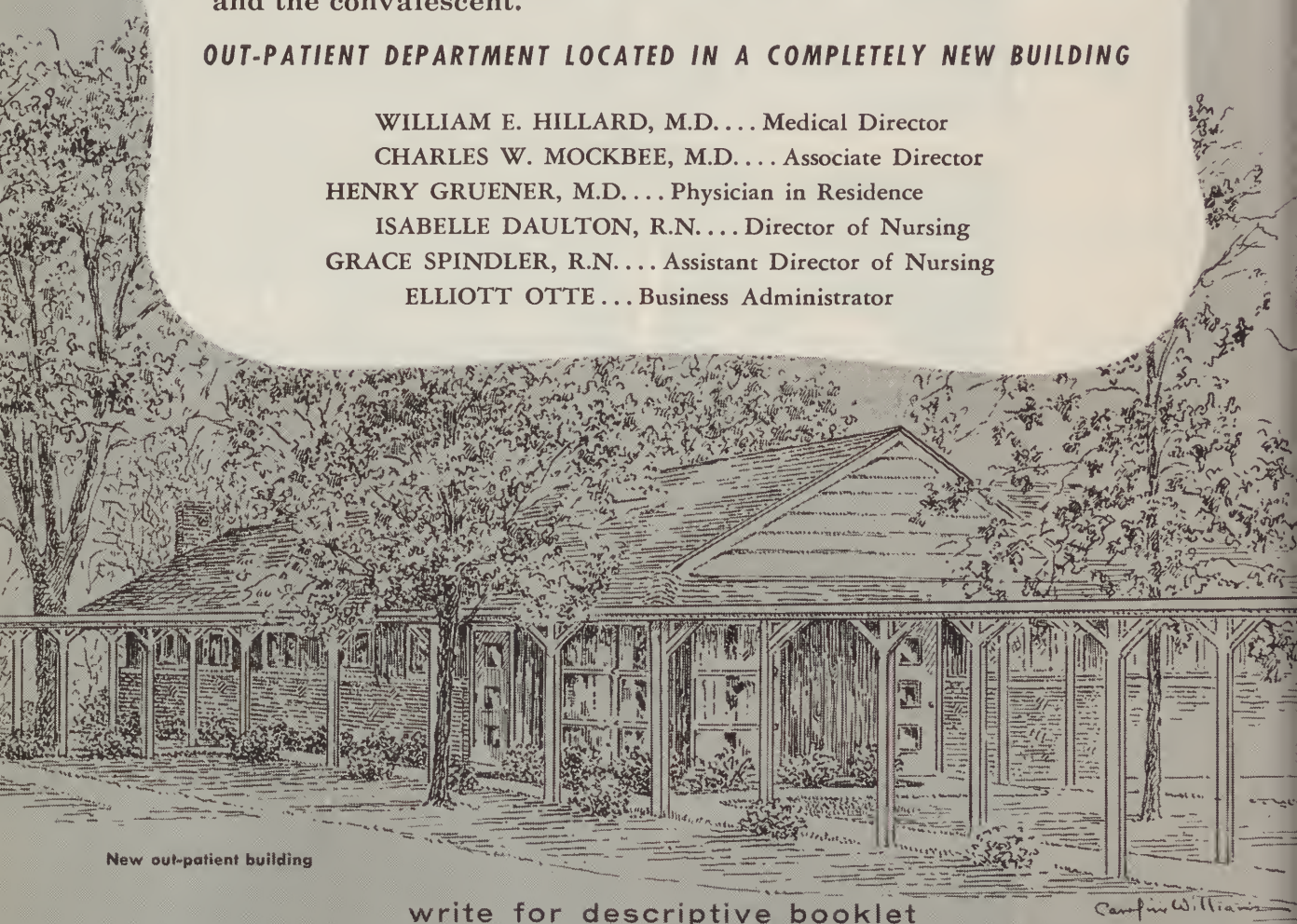
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Riseman, J. E. F., Altman, G. E., and Koretsky, S.:
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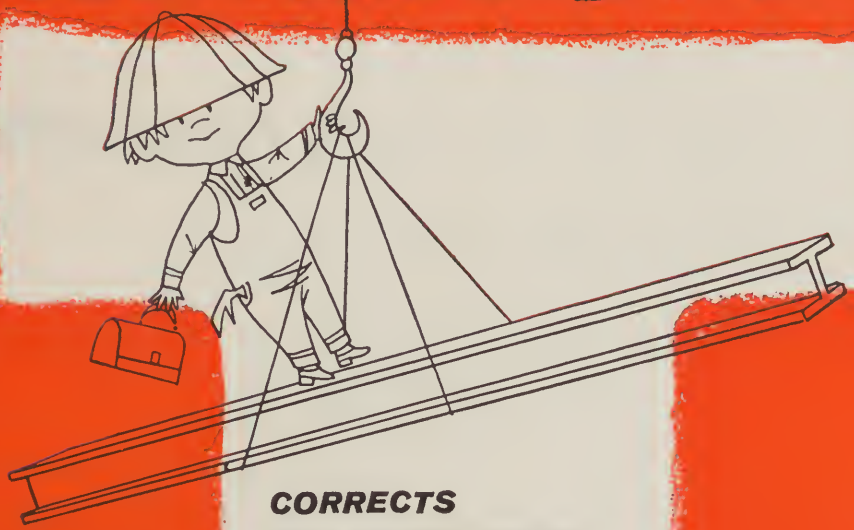
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FORMULA: Each teaspoonful (5 cc.) contains:

l-Lysine HCl	300 mg.
Ferric Pyrophosphate (Soluble)	250 mg.
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Thiamine Mononitrate (B_1)	10 mg.
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Alcohol	0.75%

Average dosage is 1 teaspoonful daily.
Available in bottles of 4 fl. oz.

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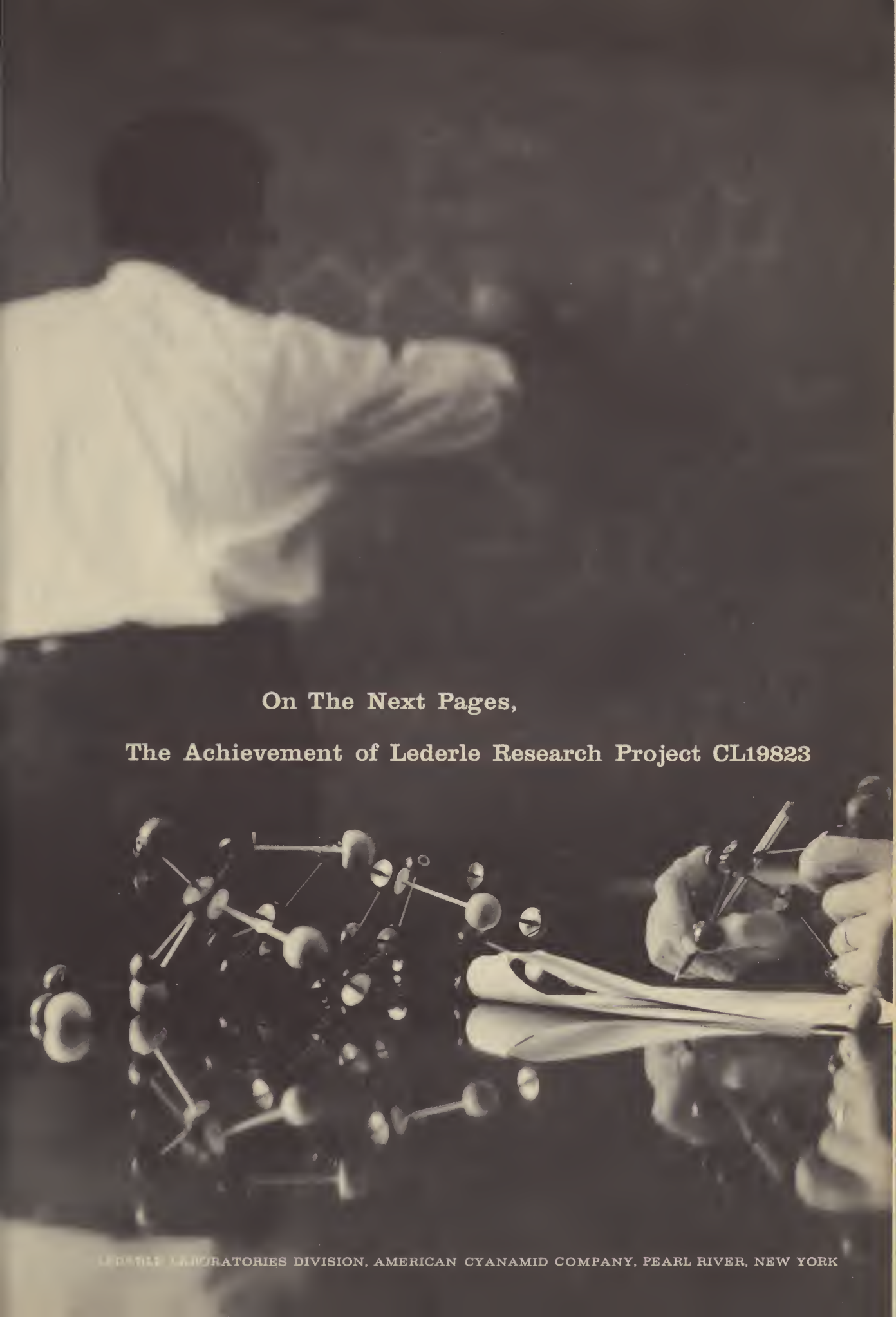
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The nutritional statements made in this advertisement have been reviewed by the Council on Foods and Nutrition of the American Medical Association and found consistent with current authoritative medical opinion.

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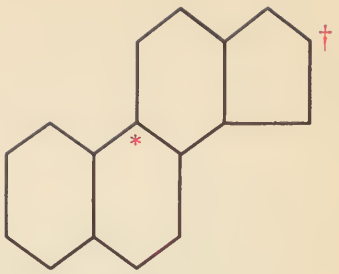
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9 alpha-fluoro-16 alpha-hydroxyprednisolone

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- **a new high** in anti-inflammatory effects with lower dosage (averages 1/3 less than prednisone)
- **a new low** in the collateral hormonal effects associated with all previous corticosteroids
  - No sodium or water retention
  - No potassium loss
  - No interference with psychic equilibrium
  - Low incidence of peptic ulcer and osteoporosis

Biological Effects of Aristocort

with particular emphasis on:

Kidney function

Animal studies on ARISTOCORT[1] have not demonstrated any interference with creatinine or urea clearance. Autopsy surveys of organs of animals on prolonged study of this medication have shown no renal damage.

Sodium and water

ARISTOCORT produced an increase of 230 per cent of water diuresis and 145 per cent sodium excretion when compared to control animals.[1] Metabolic balance studies in man revealed an average negative sodium balance of 0.8 Gm. per day throughout a 12-day period on a dosage of 30 mg. per day.[2] Additional balance studies showed actual sodium loss when ARISTOCORT was given in doses of 12 mg. daily.[3] Other investigators observed significant losses of sodium and water during balance studies and that those patients with edema from some older corticosteroids lost it when transferred to ARISTOCORT.[4,5] In two studies of various rheumatic disorders (194 cases) on prolonged treatment, sodium and water retention was not observed in a single case.[6,7]

Potassium and chlorides

There was no active excretion of potassium or chloride ions in animals given maintenance doses of ARISTOCORT 25 times that found to be clinically effective.[1] Potassium balance studies in humans[2,3] revealed that negative balance did not occur even with doses somewhat higher than those employed for prolonged therapy in rheumatoid arthritis. Hypokalemia, hyperkalemia or hypochloremia did not occur, when tested, in 194 patients with rheumatoid arthritis treated for up to ten and one-half months.[6,7]

Calcium and phosphorus

Phosphate excretion in animals[1] was not changed from normal even with amounts 25 times greater (by body weight) than those known to be clinically effective. Human metabolic balance studies[3] demonstrated that no change in calcium excretion occurred on dosages usually employed clinically when the compound is administered for its anti-inflammatory effect. Even at a dosage level twice this, slight negative balance appeared only during a short period.

Protein and nitrogen balance

Positive nitrogen balance was maintained during a human metabolic study on maintenance dosage of 12 mg. per day.[3] At dosages two to three times normal levels, positive balance was maintained except for occasional short periods in metabolic studies of several weeks' duration.[2,3]

There was always a tendency for normalization of the A/G ratio and elevation of blood albumin when ARISTOCORT was used in treating the nephrotic syndrome.[8]



Liver glycogen deposition and inflammatory processes

An intimate correlation exists between the ability of a corticosteroid to cause deposition of glycogen in the liver and its capacity to ameliorate inflammatory processes.

In animal liver glycogen studies, relative potencies of ARISTOCORT over cortisone of up to 40 to 1 have been observed. Compared to ARISTOCORT, five to 12 times the amount of prednisone is required to produce varying but equal amounts of glycogen deposition in the liver.[1]

Most patients show normal fasting blood sugars on ARISTOCORT. Diabetic patients on ARISTOCORT may require increased insulin dosage, and occasional latent diabetics may develop the overt disease.

Anti-inflammatory potency of ARISTOCORT was determined by both the asbestos pellet[1] and cottonball[9] tests. It was found to be nine to 10 times more effective than hydrocortisone in this respect.

Gastric acidity and pepsin

The precise mode of ulcerogenesis during treatment with corticosteroids is not known. There is much experimental evidence for believing this may be related to the tendency of these agents to increase gastric pepsin and acidity—and this cannot be abolished by vagotomy, anticholinergic drugs or gastric antral resection.[10] Clinical studies[11] of patients on ARISTOCORT revealed that uropepsin excretion is not elevated. Further, their basal acidity and gastric response to histamine stimulation were within normal limits.

Central nervous system

The tendency of corticosteroids to produce euphoria, nervousness, mental instability, occasional convulsions and psychosis is well known.[12] The mechanism underlying these disturbances is not well understood.

ARISTOCORT, on the contrary, does not produce a false sense of well being, insomnia or tension except in rare instances. In the treatment of 824 patients, for up to one year, not a single case of psychosis has been produced. In general, it appears to maintain psychic equilibrium without producing cerebral stimulation or depression.

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Lederle

The Promise of Aristocort in Reduction of Side Effects

It is axiomatic to affirm that the undesirable collateral hormone effects of corticosteroids increase in frequency and severity the higher the dosage and the longer used.

It has also become well recognized that the most serious of the major side effects from long-term corticosteroid treatment are peptic ulcers, osteoporosis with fracture, drug psychosis and euphoria, and sodium and water retention leading often to general tissue edema and hypertension.

It is significant that of the close to 400 patients on the lower dosage schedules found effective in bronchial asthma and dermatologic conditions, only 1 case of peptic ulceration has developed. No other of the above side effects have been observed even though ARISTOCORT was administered continuously to them for periods as long as one year.

The treatment of rheumatoid arthritis with steroids appears to result in the highest incidence of side effects. For this reason, the side effects associated with ARISTOCORT therapy in 292 patients with rheumatoid arthritis are reported below.

Peptic Ulcer

The occurrence of peptic ulcer in 292 patients with rheumatoid arthritis treated continuously for up to one year with ARISTOCORT is approximately 1 per cent (2 of the 3 occurred in patients transferred from prednisone). In the remaining 532 cases recently analyzed, only one ulcer has been discovered in a patient who apparently had no ulcer when he was changed from another steroid.

Osteoporosis and Compression Fractures

The occurrence of osteoporosis with compression fracture in 292 patients with rheumatoid arthritis treated continuously for up to one year with ARISTOCORT is 0.33 per cent (1 case[1]). Although these results are encouraging, determination of the true incidence of osteoporosis will have to await the passage of more time.

Euphoria and Psychosis

The euphoria so commonly produced by all previous corticosteroids has seemed a most desirable attribute to patients. In penalty, however, they have often later to pay for this by mental disturbances, varying from mild and transitory to severe depression and psychosis,[2] and toxic syndromes producing even convulsions and death.[3]

Since the onset of these complications is not directly related to duration of steroid administration,[4] the fact that not one case of psychosis occurred in 824 patients treated with ARISTOCORT, is most encouraging.

Sodium Retention—Hypertension–Potassium Depletion

When 17 patients were changed from prednisone to ARISTOCORT, 11 rapidly lost weight although only one had had visible edema.[5] Sodium and water retention, hypokalemia or hyperkalemia and steroid hypertension did not appear in 194 rheumatoid arthritis patients treated with ARISTOCORT.[1,6]

The interrelation between blood and body sodium, and steroid hypertension has long been generally appreciated.[7,8] Except in rare instances, or when unusually high doses are used (e.g., leukemia), the problem of edema and hypertension caused by sodium and water retention, has been eliminated with ARISTOCORT.

Minor Side Effects

Collateral hormonal effects of less serious consequence occurred with approximately the same frequency as with the older corticosteroids.[1] These include erythema, easy bruising, acne, hypertrichosis, hot flashes and vertigo. Several investigators have reported symptoms not previously described as occurring with corticosteroid therapy, e.g., headaches, lightheadedness, tiredness, sleepiness and occasional weakness.

Moon facies and buffalo humping have been seen in some patients on ARISTOCORT. However, ARISTOCORT therapy, in many instances, resulted in diminution of "Cushingoid" signs induced by prior therapy. Where this occurs, it may be related to reduced dosage on which patients can be maintained.

Reduction of dosage by one-third to one-half

In a double-blind study of comparative dosage in patients with rheumatoid arthritis,[9] 70 per cent of the cases were as well controlled on a dose of ARISTOCORT one-half that of prednisone. A general recommendation can be made that ARISTOCORT be used in doses two-thirds that of prednisone or prednisolone in the treatment of rheumatoid arthritis. There are individual variations, however, and each patient should be carefully titrated to produce the desired amount of disease suppression.

Comparative studies, of patients changed from prednisone, indicate reduced dosage of ARISTOCORT in bronchial asthma and allergic rhinitis (33 per cent),[5] and in inflammatory and allergic skin diseases (33-50 per cent).[10,11]

General Precautions and Contraindications

Administration of ARISTOCORT has resulted in lower incidence of major serious side effects, and in fewer of the troublesome minor side effects known to occur with all previously available corticosteroids. However, since it is a highly potent glucocorticoid, with profound metabolic effects, all traditional contraindications to corticosteroid therapy should be observed.

No precautions are necessary in regard to dietary restriction of sodium or supplementation with potassium.

Since ARISTOCORT has less of the traditional side effects, the appearance of sodium and water retention, potassium depletion, or steroid hypertension cannot be used as signs of overdosage. As a rule patients will lose some weight during the first few days of treatment as a result of urinary output, but then the weight levels off.

Patients do not develop the abnormally voracious appetite common to previous corticosteroid administration. In fact, some patients experienced anorexia, and it is advisable to inform patients of this and to recommend they maintain a normal intake of food, with emphasis on liberal protein intake.

While precipitation of diabetes, peptic ulcer, osteoporosis, and psychosis can be expected to appear rarely from ARISTOCORT, they must be searched for periodically in patients on long-term steroid therapy.

Traditional precautions should be observed in gradually discontinuing therapy, in meeting the increased stress of operation, injury and shock, and in the development of intercurrent infection.

There is one overriding principle to be observed in the treatment of any disease with ARISTOCORT. *The amount of the drug used should be carefully titrated to find the smallest possible dose which will suppress symptoms.*

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The Promise of Aristocort in Rheumatoid Arthritis

ARISTOCORT *therapy has been intensely and extensively studied for periods up to one year on 292 patients with rheumatoid arthritis.*

Significant is the fact that most patients were *severe* arthritics, transferred to ARISTOCORT from other corticosteroids because satisfactory remission had not been attained, or because the seriousness of collateral hormonal effects had made discontinuance desirable.

Results of treatment

Freyberg and associates[1] treated 89 patients with rheumatoid arthritis (A. R. A. Class II or III and Stage II or III). Of these, 51 were on ARISTOCORT therapy from three to over 10 months. In all but a few patients, satisfactory suppression of rheumatoid activity was obtained with 10 mg. per day. Thirteen were controlled on 6 mg. or less a day, and for periods to 180 days. The investigators reported therapeutic effect in most cases to be A. R. A. Grade II (impressive) and that marked reduction in sedimentation rates occurred.

Another interesting observation in this study: Of the 89 patients treated, 12 had active ulcers, developed from prior steroid therapy. *In six patients, the ulcers healed while on doses of* ARISTOCORT *sufficient to control arthritic symptoms.*

Hartung[2] treated 67 cases of rheumatoid arthritis for up to 10 months. He found the optimum maintenance dose to be 11 mg. per day. Nineteen of these patients were treated for six to 10 months with an "excellent" therapeutic response.

Dosage and course of therapy

The initial dosage range recommended is 14 to 20 mg. per day—depending on the severity and acuteness of signs and symptoms. Dosage is divided into four parts and given with meals and at bedtime. Anti-rheumatic effect may be evident as early as eight hours, and full response often obtained within 24 hours. This dosage schedule should be continued for two or three days, or until all acute manifestations of the disease have subsided, whichever is later.

The maintenance level is arrived at by reduction of the total daily dosage in decrements of 2 mg. every three days. The range of maintenance therapy has been found to be from 2 mg. to 15 mg. per day—with only a very occasional patient requiring as much as 20 mg. per day. Patients requiring more than this should not be long continued on steroid therapy.

The aim of corticosteroid therapy in rheumatoid arthritis is to suppress the disease only to the stage which will enable the patient to carry out the required activities of normal living or to obtain reasonable comfort. The maintenance dose of ARISTOCORT to achieve this end is arrived at while making full use of all other established methods of controlling the disease.

ARISTOCORT is available in 2 mg. scored tablets (pink); 4 mg. scored tablets (white). Bottles of 30.

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The Promise of Aristocort in Respiratory Allergies

About 200 patients with respiratory allergies have been treated with ARISTOCORT *for continuous periods up to eight months.*

Results of treatment

Sherwood and Cooke[1,2] gave ARISTOCORT to 42 patients with bronchial asthma and allergic rhinitis. Average dose needed to control the asthmatic group was approximately 6 mg. per day (range, 2 to 14 mg.). Results, which were called "good to excellent" in all but four, were achieved on one-third less than similarly effective doses of prednisone or prednisolone.

The investigators noted other major improvements in ARISTOCORT therapy over the older steroids. There was no increase in blood pressure in any patient: *on the contrary, in 12 patients, there was reduction of pressure when they were transferred to* ARISTOCORT. One patient had required auxiliary antihypertensive drug therapy; over a nine-week period on ARISTOCORT, the pressure gradually fell from 206/100 to 136/79. In another case, the pressure slowly dropped from 205/105 to 154/86.

The number of cases in which these investigators tried ARISTOCORT in allergic rhinitis was not large enough to provide significant averages. However, the range of effective therapy was from 2 to 6 mg. per day. These strikingly low daily doses resulted in control of all signs and symptoms.

Schwartz[3] treated 30 patients with chronic, intractable bronchial asthma. At an average daily dose of 7 mg., he reported "good to excellent" results in all but one. Spies,[4] Barach[5] and Segal,[6] reported similar results at average daily maintenance doses of 4 to 10 mg. of ARISTOCORT.

Dosage and course of therapy

The initial dosage range recommended is 8 to 14 mg. of ARISTOCORT daily. Although a rare, very severe case may require more than this on the first day of therapy, these dosages will usually result in prompt alleviation of dyspnea, wheezing and cyanosis. Patients are soon able to carry out a normal span of daily activity.

The maintenance level is arrived at by reduction of the total daily dose every three days in decrements of 2 mg.; in the over-all series, the average daily dose for bronchial asthma is approximately 8 to 10 mg. and for allergic rhinitis, 2 to 6 mg. per day. All total daily doses should be divided into four parts and given with meals and at bedtime. As in every condition where corticosteroids are employed, each patient's treatment should be individualized and the maintenance arrived at by careful titration against signs and symptoms of disease.

Patients with chronic bronchial asthma may require steroid therapy for several months. And since asthma may be associated with cardiac disease, especially in the older age groups, ARISTOCORT is particularly useful because of its ability to cause excretion of sodium and water.

ARISTOCORT is available in 2 mg. scored tablets (pink); 4 mg. scored tablets (white). Bottles of 30.

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Lederle

The Promise of Aristocort

in Nephrotic Syndrome

Fourteen patients with the nephrotic syndrome have been treated with ARISTOCORT *for continuous periods of up to six weeks.*

Results of treatment

Hellman and associates[1,2] noted that ARISTOCORT, because of its favorable electrolyte effects, may well be the most desirable steroid to date in treatment of the nephrotic syndrome. However, thus far its use has been reported in only 14 children, of whom 8 had a complete diuresis and disappearance of all abnormal chemical findings. Four of the patients had diuresis, but continued to show some abnormal chemical findings, while two patients with signs of chronic renal disease failed to respond.

Dosage and course of therapy

In order to produce maximal response, 20 mg. should be given daily until diuresis occurs. The dose should then be decreased gradually and maintained around 10 mg. a day. After the patient has been in remission for some time, it may be advisable to diminish the dose gradually and discontinue ARISTOCORT.

in Pulmonary Emphysema and Fibrosis

Eleven patients with pulmonary emphysema and/or fibrosis were treated with ARISTOCORT *for continuous periods of over two months.*

Results of treatment

Only small series of cases observed by Barach,[3] Segal,[4] and Cooke,[5] are available. Barach treated patients who were not adequately controlled by prednisone, with the same dose of ARISTOCORT with significant improvement.

Dosage and course of therapy

The initial suppressive dose range recommended is 10-14 mg. daily. Frequently, there is a prompt decrease in cyanosis and dyspnea, with increase in vital capacity.

The average maintenance dose level was 8 mg. a day. If it is desired to maintain a patient on continuous therapy for some months, dosages as low as 2 mg. a day have been successful. All decreases in dosage should be gradual and at a rate of 2 mg. decrements in total daily amount, every two to four days. The daily dosage is divided into four parts and given with meals and at bedtime.



in Neoplastic Diseases

Forty-four children and adults have been given ARISTOCORT *for palliative treatment of acute leukemia, chronic lymphatic leukemia, lymphosarcoma, lympholeukosarcoma and Hodgkin's disease.*

Results of treatment

Farber[6] has treated 22 children with acute leukemia for an average of three weeks. Of the 17 observed long enough to judge the efficacy of the medication, he rated five as excellent, three as good, two as fair and seven as poor responses.

Hellman and associates[7] gave ARISTOCORT to a group of patients with the various lymphomas in doses of 40 to 50 mg. a day—occasionally up to 100 milligrams. Treatment was continued in some cases for 17 weeks. Response was classified as good for the palliative purposes for which the drug was given.

Dosage and course of therapy

Massive initial suppressive doses of 40 to 50 mg. per day in children (1 mg./kg./day) and up to 100 mg. a day in adults have been administered.

Responses to any specific dosage in these conditions vary so widely that only a general dosage range can be indicated. Treatment must be individualized; rate of reduction in dosage and determination of maintenance levels cannot be categorized.

Miscellaneous

Patients with various other diseases have been treated by several clinical investigators. These include patients with osteoarthritis, acute bursitis, rheumatic fever, spondylitis, other "collagen-vascular" diseases (dermatomyositis, etc.), thrombocytopenic purpura, chronic eosinophilia, hemolytic anemia, diuretic-resistant congestive heart failures, and adrenogenital syndrome.

There have not been sufficient patients in any of the above categories to permit definitive treatment schedules to be finally established for ARISTOCORT. Additional studies are now in progress and physicians desiring information on any of these diseases are requested to write to Lederle Laboratories, Pearl River, New York for available data.

ARISTOCORT is available in 2 mg. scored tablets (pink); 4 mg. scored tablets (white). Bottles of 30.

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1. Hellman, L., Zumoff, B., Kretshmer, N., and Kramer, B.: Presented at Nephrosis Conf., Bethesda, Md., Oct. 26, 1957. 2. Ibid: Personal Communication. 3. Barach, A. L: Personal Communication. 4. Segal, M. S.: Personal Communication. 5. Cooke, R. A.: Personal Communication. 6. Farber, S.: Personal Communication. 7. Hellman, L., Diamond, H. D., Ellison, R., Jaslowitz, B., Murphy, M. L., Tan, C. and Zumoff, B.: Personal Communication.

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The Promise of Aristocort

in Inflammatory and Allergic Skin Diseases

◊ *Over 200 patients with allergic and inflammatory skin diseases (including psoriasis, atopic dermatitis, exfoliative dermatitis, pemphigus, dermatitis herpetiformis, eczematoid dermatitis, contact dermatitis and angioneurotic edema) have been treated continuously with* ARISTOCORT *for periods of up to eight months.*

Results of treatment

Rein and associates[1] treated 26 patients with severe dermatitis. Twenty-four had been on prednisone when changed to ARISTOCORT. While some had found satisfactory symptomatic relief, others had also developed side effects—moon face, buffalo hump, increased appetite with excessive weight increases and gastro-intestinal disturbances.

These investigators determined the equivalent dosage of ARISTOCORT to be approximately two-thirds that required to control symptoms on the previous corticosteroid. Thirteen of the 26, who had developed moon face, noted either an actual decrease or no further increase when transferred to ARISTOCORT. In addition: *Voracious appetites disappeared, with loss of weight in 11 patients; there was no elevation in blood pressure, and no necessity to restrict sodium or administer supplemental potassium.* Sherwood and Cooke,[2] and Shelley and Pillsbury[3] obtained similar results in allied disorders.

Hollander[4] first observed that ARISTOCORT appears to have striking affinity for the skin and great activity in controlling such diseases as psoriasis, for which other corticosteroids have been indifferently effective. Shelley and Pillsbury,[3] in 50 cases of acute extending psoriasis found that over 60 per cent were markedly improved.

Dosage and course of therapy

The recommended initial suppressive dose range is 14 to 20 mg. per day. In very severe cases, temporary dosages up to 32 mg. a day have been successfully employed. Once lesions are suppressed, gradually reduce dose to the maintenance level—which may be as low as 2 mg. per day.

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in Disseminated Lupus Erythematosus

◊ *Forty patients with disseminated lupus erythematosus were treated with* ARISTOCORT *for continuous periods of up to nine months.*

Results of treatment

Patients have responded very promisingly to therapy. Dubois[1] has had the largest single experience (28 cases) with ARISTOCORT in the treatment of this disease. He reported 25 of the 28 responded favorably.

Freyberg,[2] Hartung,[3] Hollander,[4] Spies,[5] and Segal,[6] each in smaller series of cases, reported similarly good therapeutic responses.

Dosage and course of therapy

The initial suppressive dose recommended is 20-30 mg. daily. Once the desired effect is achieved, the dose should be reduced gradually to maintenance levels (3 to 18 mg. per day).

In severely ill patients large doses may be required for several days in order to preserve life. Even on these large doses, edema and sodium retention have not occurred.

ARISTOCORT is available in 2 mg. scored tablets (pink); 4 mg. scored tablets (white). Bottles of 30.

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base or the hydrochloride alone. In addition, the average levels derived from the tetracycline base or the chlortetracycline base were higher than those produced by the corresponding hydrochloride though lower than those resulting from the mixture containing the base and sodium metaphosphate. In the study with chlortetracycline[6] capsules containing a mixture of the hydrochloride and sodium metaphosphate were also included in the crossover, and the average levels produced by these capsules were the same as with the mixture of chlortetracycline base with sodium metaphosphate.

Although the enhancement of blood levels of tetracycline by phosphate, either complexed to the tetracycline or mixed with the base or the hydrochloride, thus seemed fairly well established, some doubts still remained because certain reliable observers (including many whose results have not been published) failed to confirm the findings with the materials and methods they used. Further confusion seemed to be added by a subsequent report of Welch et al.,[7] who, in repeating a crossover study with capsules of tetracycline phosphate complex and tetracycline hydrochloride with and without sodium metaphosphate, found [illegible]

antibacterial activity than was observed in their absence. Oil and sorbitol did not interfere with tetracycline absorption.

Dicalcium phosphate is widely used as a filler in various capsules, including those of the tetracyclines. The authors cite a large number of other studies that implicate the presence of calcium ions as the cause of the reduced absorption of tetracyclines and show that citric acid can partially neutralize this effect. The depressing effect of food on the serum levels of tetracycline is likewise explained by the goodly amount of minerals contained in commercial laboratory diets, and they postulate that the multivalent cations may be responsible for the poorer absorption of the drug. The authors could not explain the failure of citric acid to enhance serum concentrations when administered with tetracycline base in contrast to its marked effect when given as the hydrochloride. However, they hypothesized that the ability of citric acid to enhance serum levels of tetracycline is related to its ability to form complexes [illegible]

"...Tetracycline hydrochloride and citric acid, in an encapsulated mixture, produced higher serum concentrations and greater urinary excretions, and hence better absorption of tetracyclines, than any other preparation studied..."

[illegible] addendum to the last mentioned paper of [illegible]ch et al.[7] indicates that in their study the capsules of tetracycline hydrochloride, chlortetracycline hydrochloride and tetracycline phosphate complex all contained dicalcium phosphate as a filler, whereas the capsules containing citric acid and sodium hexametaphosphate did not contain any dicalcium phosphate. This could clearly explain the discrepancies noted in that study.[7] Likewise, the inconsistencies in other studies may very well have been due to the [illegible] of calcium as fillers in some [illegible]thers.

[illegible] however,

Editorial.
The New England Journal of Medicine.
258:97-99, (January 9) 1958.

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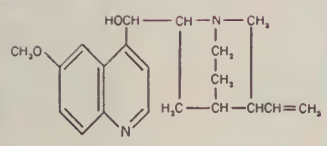
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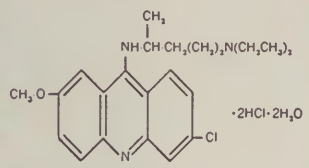
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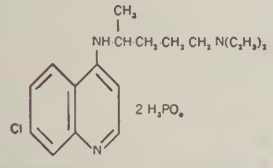
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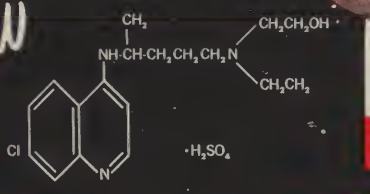
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When tetracycline therapy is indicated–

3 INDISPUTABLE POINTS



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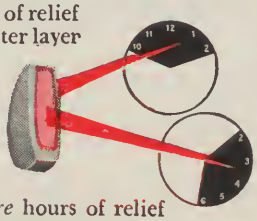
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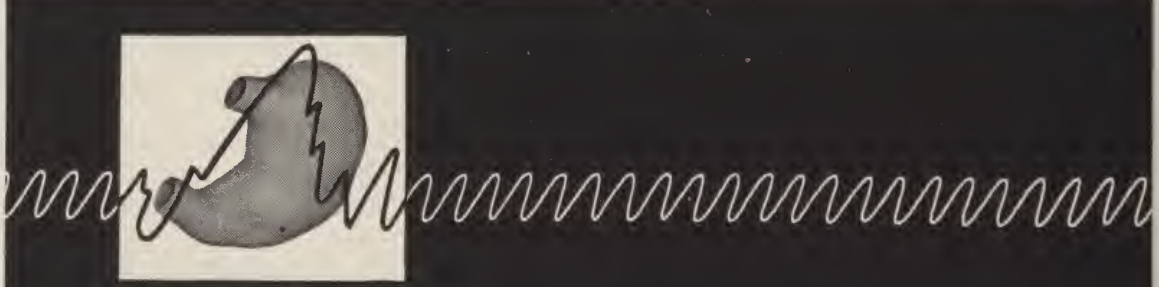


* J.A.M.A. *166*:158,1958; Welsh, A.L. and Ede, M. *"...prompt remissions of...acute phases."* with TARCORTIN

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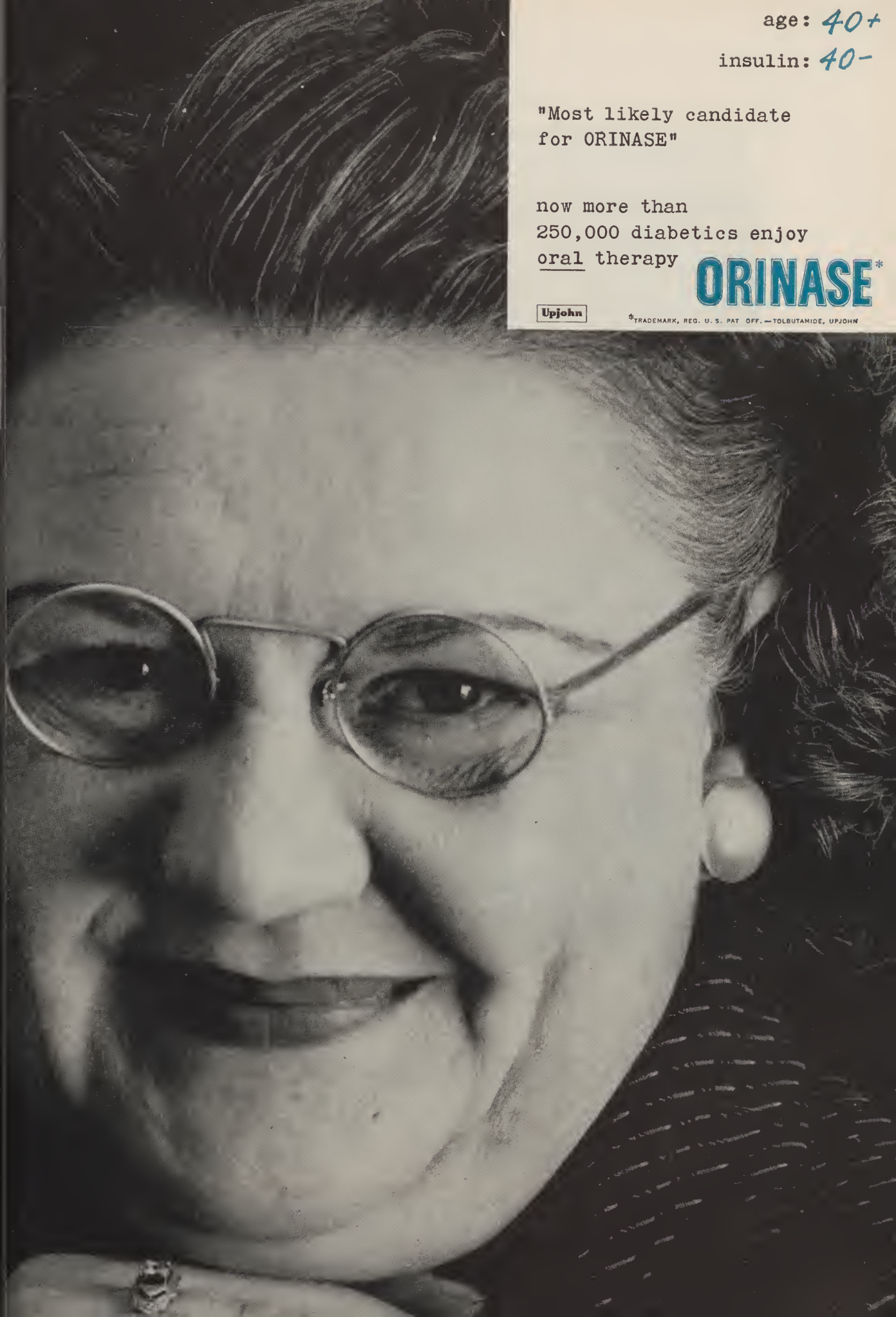


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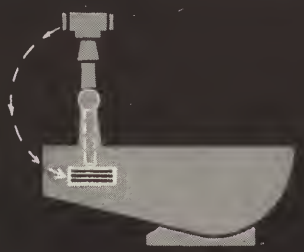
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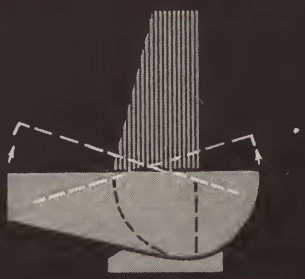
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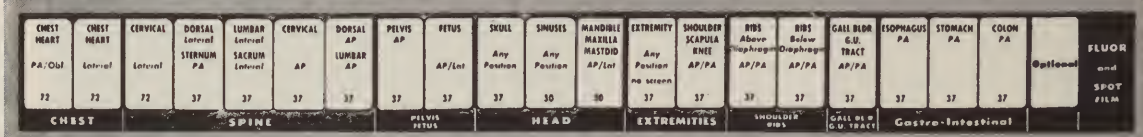


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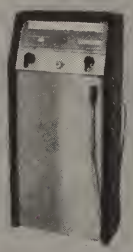
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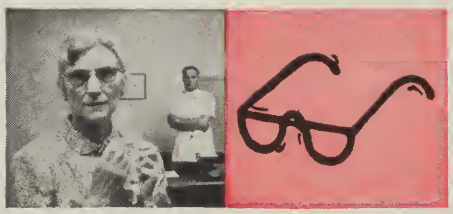
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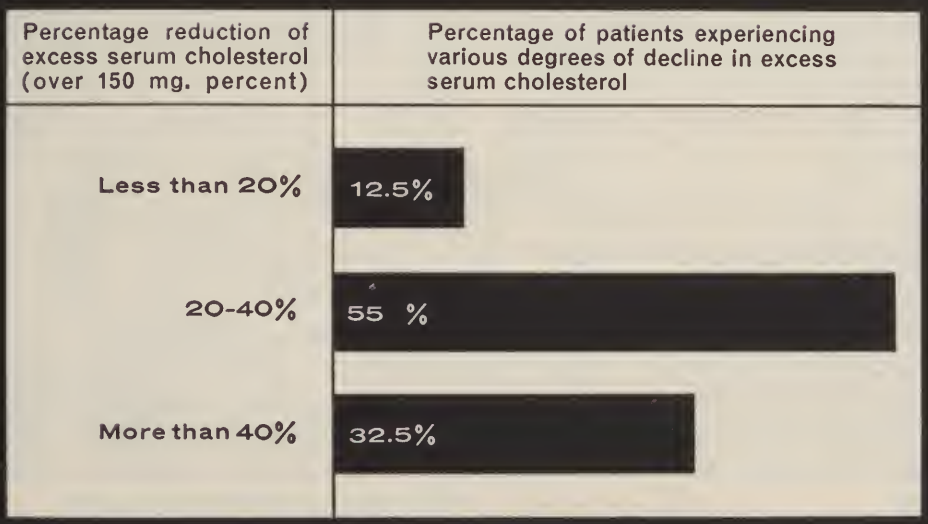
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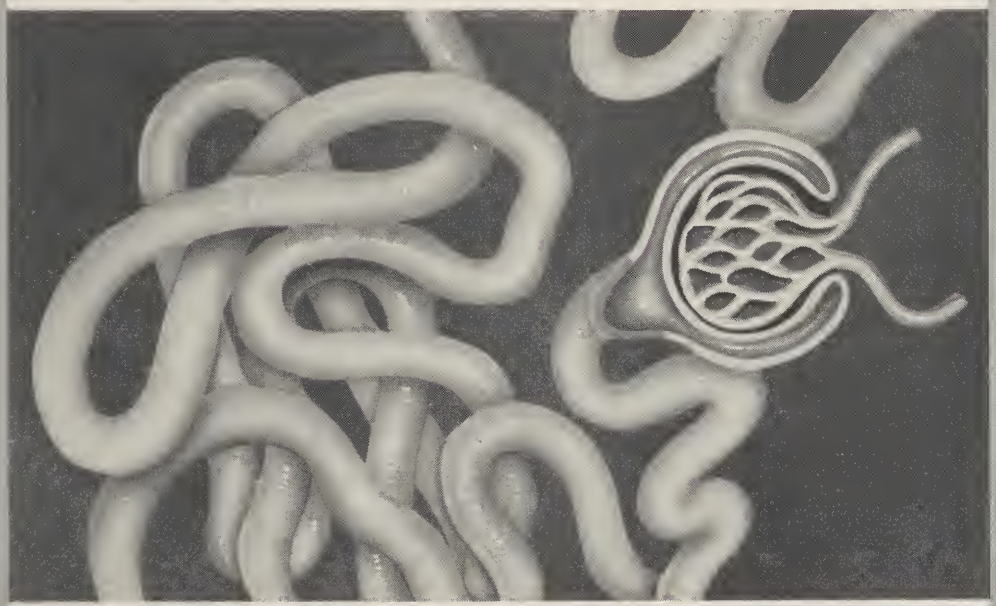
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Source—Hoffman, W. S.: The Biochemistry of Clinical Medicine, Chicago, The Year Book Publishers, Inc., 1954, p. 233.

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Varicose Veins

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Annual Meeting
Sept. 23-25, 1958

VOLUME 56 • NUMBER 6 • JUNE 1958

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REFERENCES: (1) Roy, T. E.; Collins, A. M.; Craig, G., & Duncan, I. B. R.: *Canad. M.A.J.* 77:844 (Nov. 1) 1957. (2) Schneierson, S. S.: *J. Mt. Sinai Hosp.* 25:52 (Jan.-Feb.) 1958. (3) Hasenclever, H. F.: *J. Iowa M. Soc.* 47:136, 1957. (4) Rhoads, P. S.: *Postgrad. Med.* 21:563, 1957. (5) Caswell, H. T., and others: *Surg. Gynec. & Obst.* 106:1, 1958. (6) Josephson, J. E., & Butler, R. W.: *Canad. M.A.J.* 77:567 (Sept. 15) 1957. (7) Petersdorf, R. G.; Curtin, J. A., & Bennett, I. L., Jr.: *Arch. Int. Med.* 100:927, 1957. (8) Waisbren, B. A., & Strelitzer, C. L.: *Arch. Int. Med.* 101:397, 1958. (9) Holloway, W. J., & Scott, E. G.: *Delaware M. J.* 29:159, 1957. (10) Murphy, J. J., & Rattner, W. H.: *J.A.M.A.* 166:616 (Feb. 8) 1958. (11) Neter, E., & Hodes, H. L.: *Pediatrics* 20:362, 1957. (12) Woolington, S. S.; Adler, S. J., & Bower, A. G., in Welch, H., & Martí-Ibañez, F.: Antibiotics Annual 1956-1957, New York, Medical Encyclopedia, Inc., 1957, p. 365.

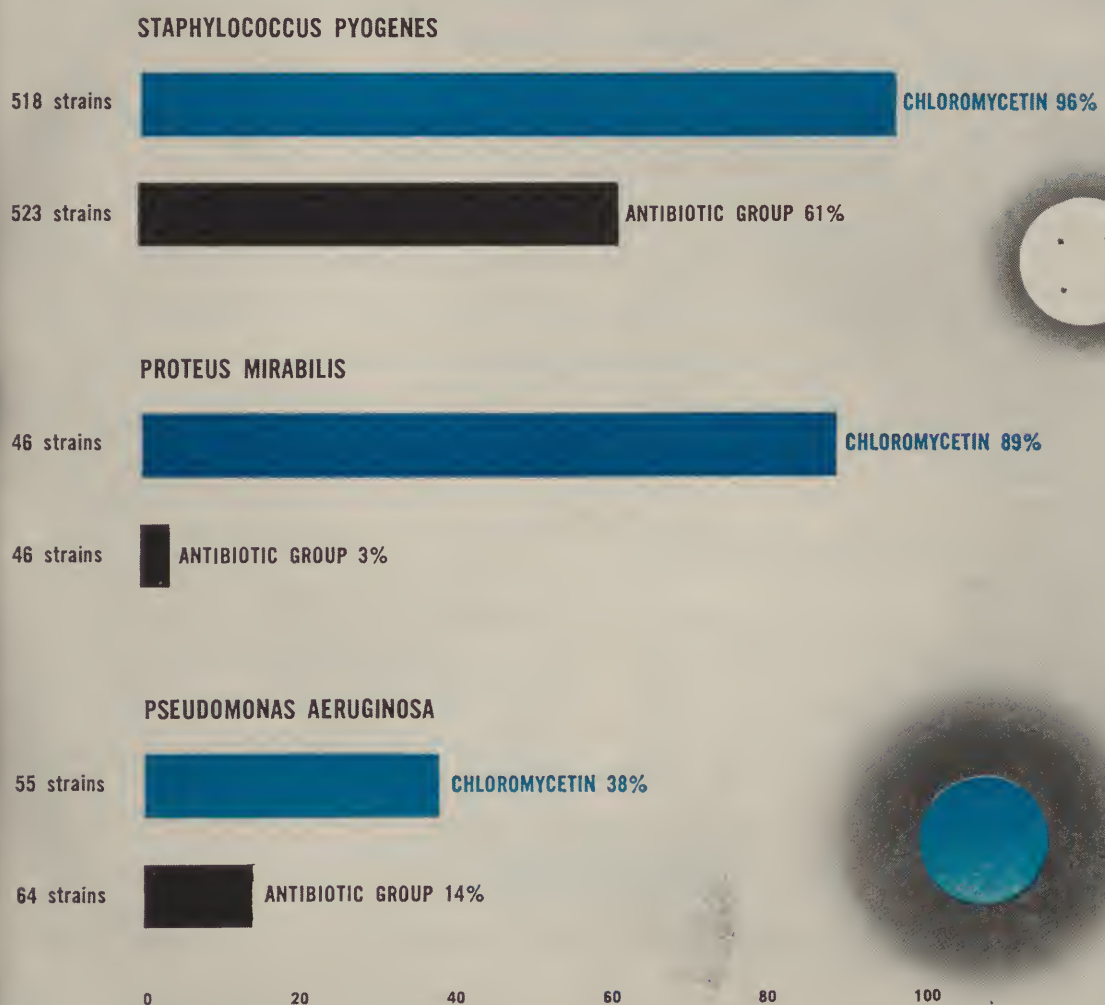


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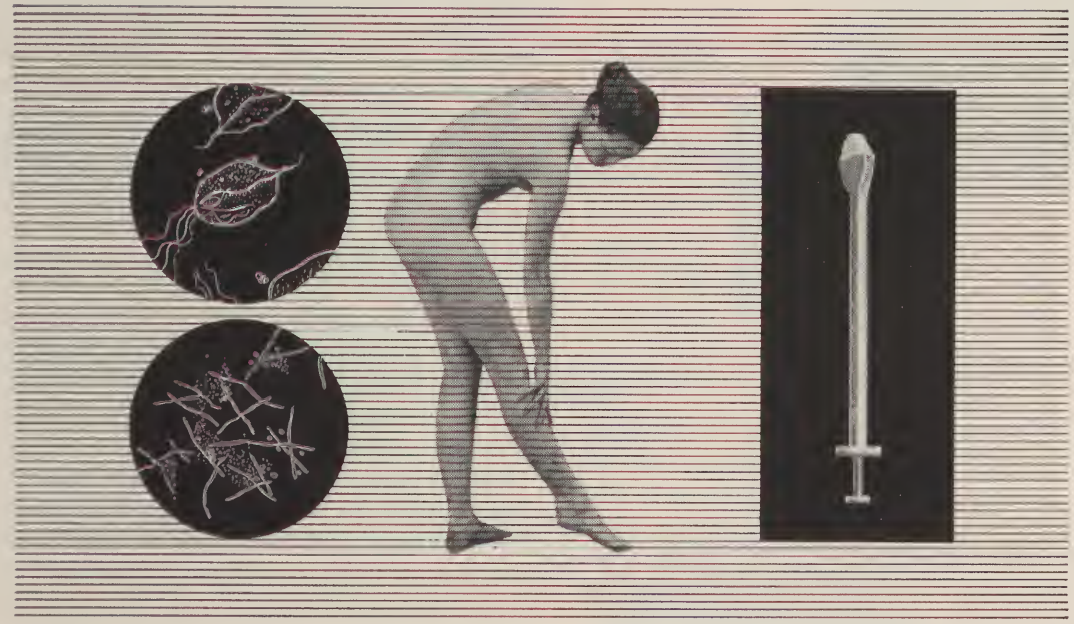
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1. Davis, C. H.: Trichomonas Vaginalis Infections: A Clinical and Experimental Study, J.A.M.A. *157:*126 (Jan. 8) 1955.

2. Pitt, M. B.: Leukorrhea, Causes and Management, J.M.A. Alabama *25:*182 (Feb.) 1956.

3. Lang, W. R.: Recent Advances in Vaginitis, Philadelphia Med. *51:*1494 (June 15) 1956.

SEARLE



message from the President

It's Time To Start – Now

OUR first president, George Washington, stated: "Against the insidious wiles of foreign influence the jealousy of a free people ought to be constantly awake; since history and experience prove that foreign influence is one of the most baneful foes of republican government."

Today George Washington would be shocked. He would wonder how this great country, which had plodded steadily on to its greatness, could fall into the trap of foreign entanglements, such as we are in today. We have blundered into one after another, and now we seem to want to bluster into more. Since 1933 we have been steadily led into international socialism. It was that year that our dollar died. It was that year first "emergency proclamation" was made. And we are still having one after another "emergency proclamation" foisted upon us.

The Banking Relief Act of 1933, gave the President the authority "to regulate transactions in credit, currency, gold, silver, and foreign exchange. It also required the Secretary of the Treasury "to require the delivery (by U. S. citizens) of all gold and gold certificates." The Government, not the people of the United States, owned all the gold and silver. And the Government buried it in Ft. Knox, Kentucky. The gold is still buried, but we are continually losing it. It is fast disappearing from the wealth of these United States.

Our international trade is conducted on the *old* basis of the gold standard, not the new or devalued dollar of the American citizen. Foreign countries measure their prosperity in terms of U. S. "dollar balance"—whether they have taken in more U. S. dollars than they have bought from us with their own currency.

There is stored in the United States $22,406,000,000 in gold, but a recent statement from the Treasury says that $16,200,000,000 of dollar credits are now owned by foreign nations and individuals. If the foreign dollar credits were to be honored today (and it is customary to honor them), we would have only $6.2 billion of U. S. gold left in the U. S. Treasury to back the $27.4 billion of outstanding paper currency.

The tragedy of this monetary fiasco rests squarely on the shoulders of Congress. Our Constitution clearly defines the duties of the three branches of Government, and the legislative decisions are to be made by Congress. Congress has no defense for allowing the President to dictate specific legislation. Congress has allowed its power to be usurped by the other branches of Government, and by the 'so-called economists' and internationally minded do-gooders. It is time Congress re-evaluated itself. It is time that Congress retrieved its losses. It is time that Congress restored itself to the dignity and function for which it was established.

Senator George Malone of Nevada describes the pincers movement of the five methods of disbursing the wealth and markets of the United States throughout the world, as an important part of the grandiose international socialist scheme to make the economic system of this Republic, a part of the nations of Europe and Asia in an interminable trade war of old Europe.

This movement to destroy the free American economic system includes these five operations:

(1) By going off the gold standard, we price ourselves out of the world markets through inflation.

(2) Congress transferred its constitutional responsibility to regulate foreign trade to the executive branch.

(3) The executive did transfer that Constitutional responsibility to Geneva, under the auspices of General Agreement on Tariffs and Trade—GATT—where 36 foreign competitive nations have divided the American markets.

(4) Congress started the world-wide distribution of the American Taxpayers' money

(Continued on Page 527)

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A Filter Queen demonstration in your home or office can be easily arranged at no obligation by writing or calling your local Filter Queen distributor.



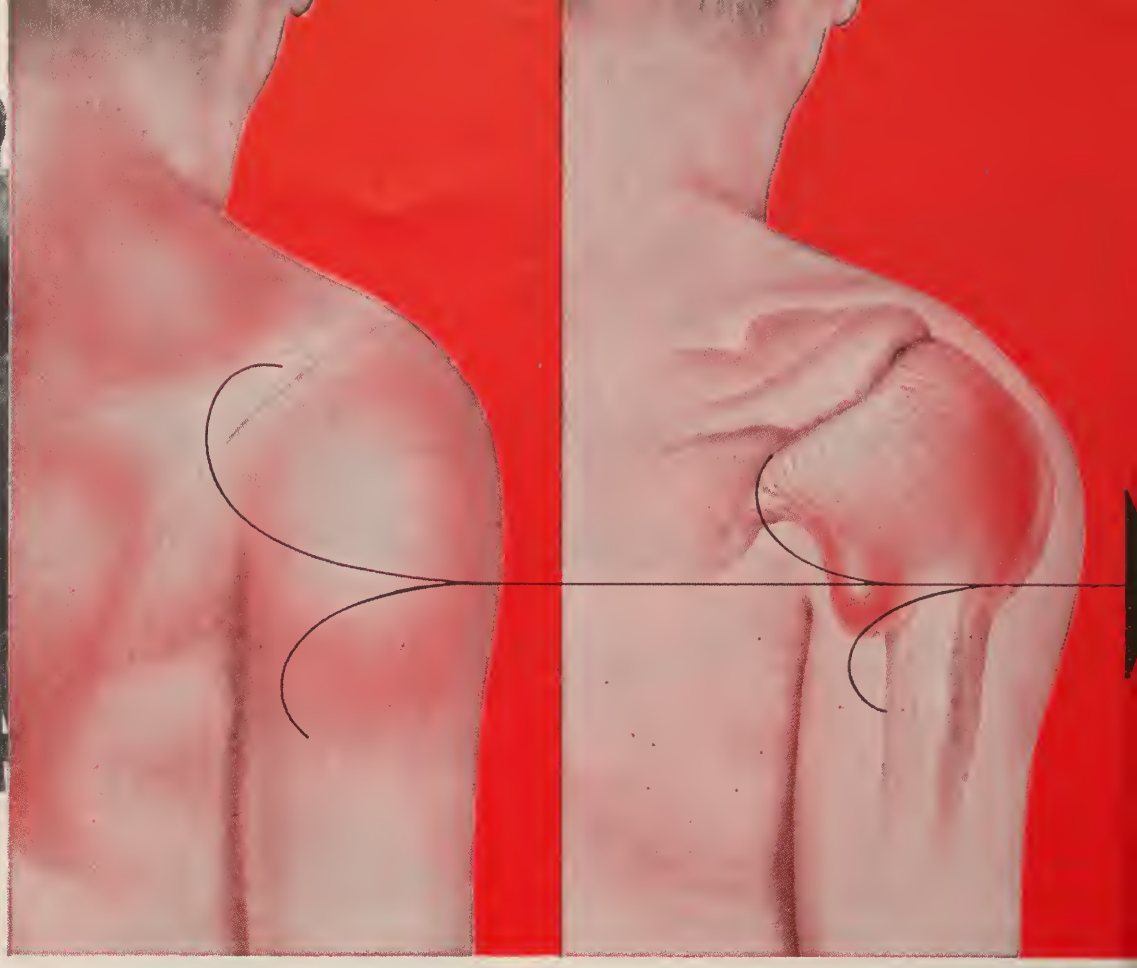
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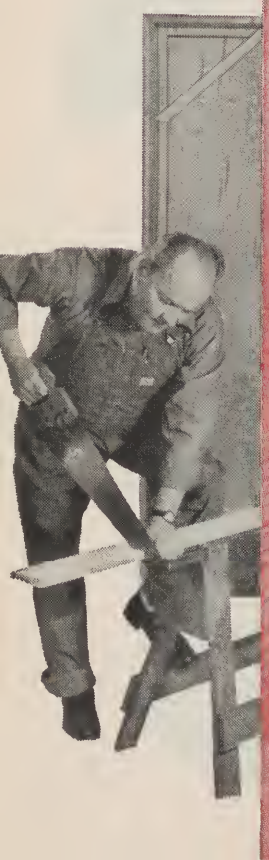
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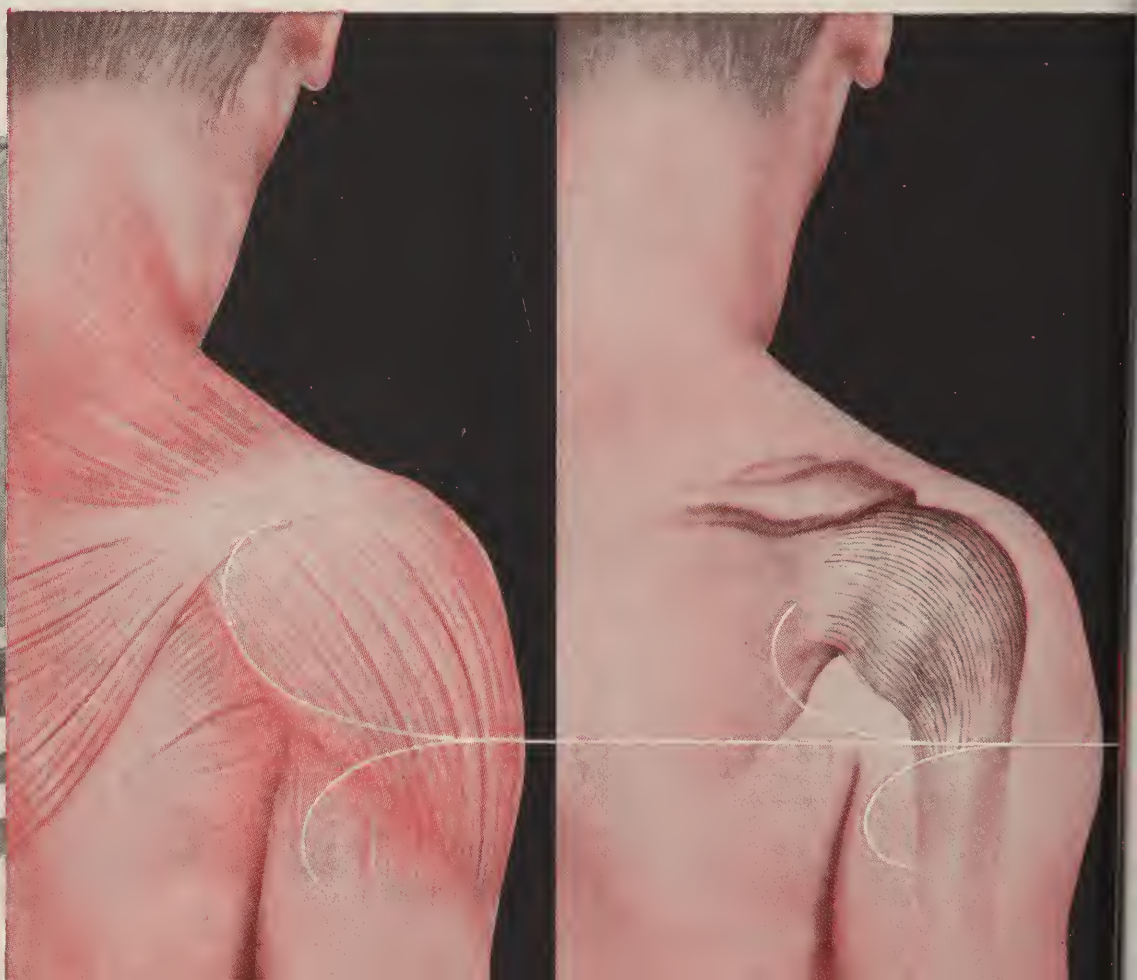
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1. Comroe's Arthritis: Hollander, J. L., p. 149 (Fifth Edition, Lea & Febiger, Philadelphia, Pa. 1953).
2. Merck Manual: Lyght, C. E., p. 1102 (Ninth Edition, Merck & Co., Inc., Rahway, N. J. 1956).

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meprobamate to relieve muscle spasm
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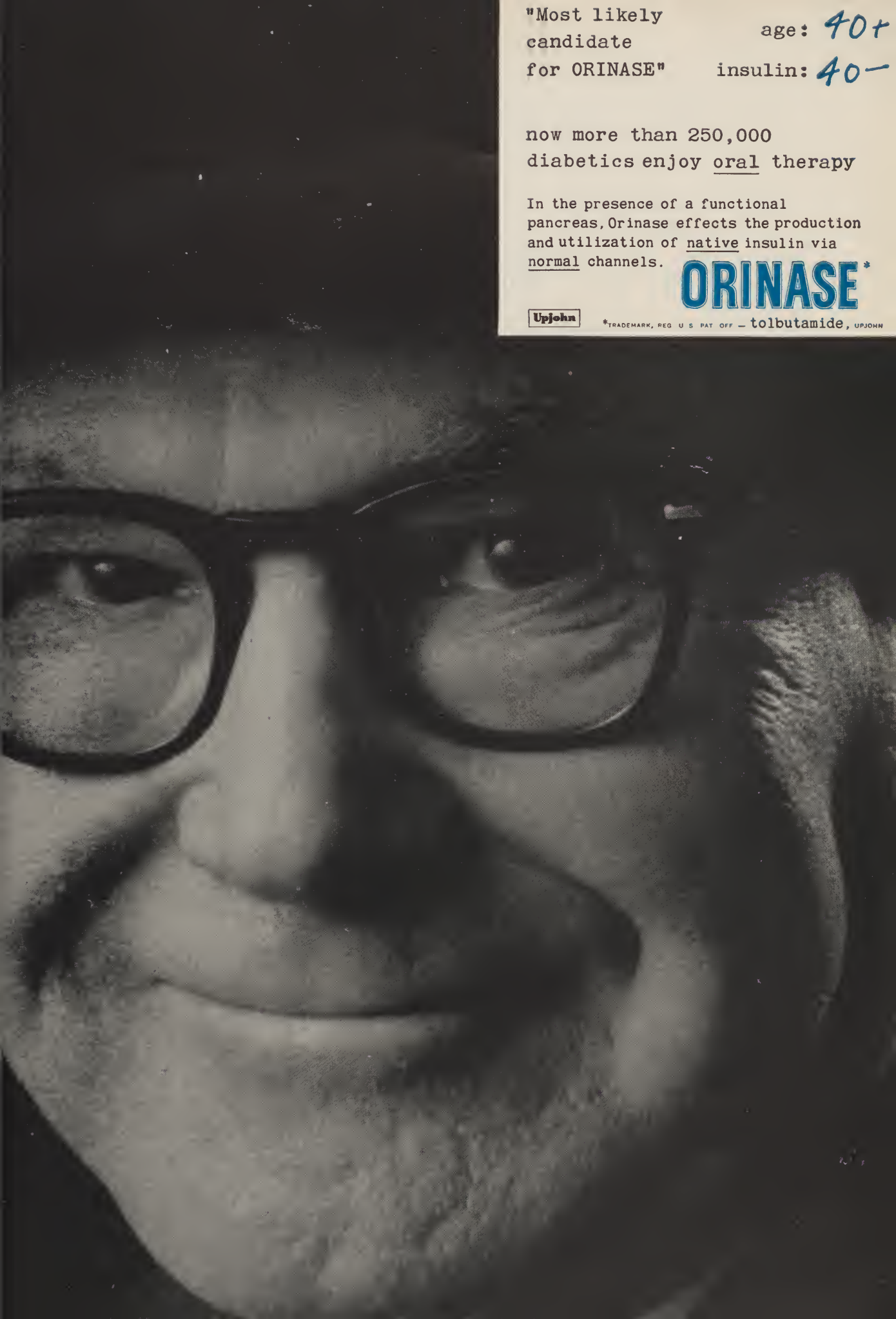
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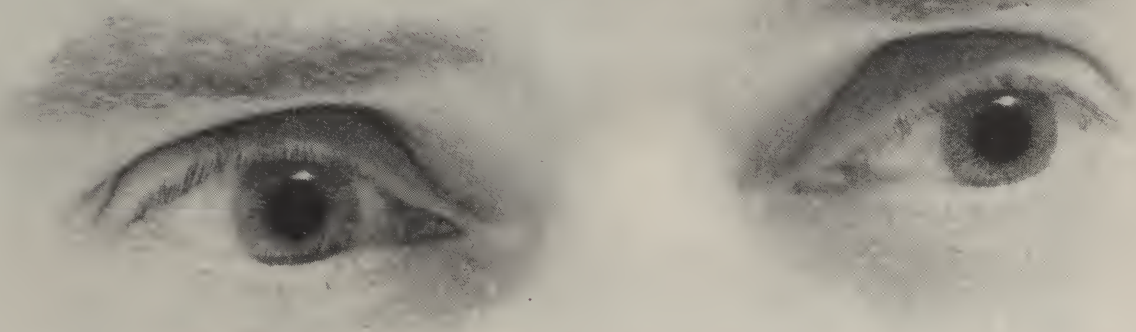
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*Howell, C. M., Jr.: Am. Pract. & Digest Treat. 8:1928, 1957.

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long day ahead
morning sun glare – eyes irritated
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1. Grossmann, E. E., and Lehman, R. H.: Am. J. Ophth. 42:121, 1956.

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IN THE BOOKS

Books Received

Following is a list of books received by the Association for review. Those considered of particular interest to Journal readers will be reviewed as space permits. All complimentary copies of books received are turned over to the University of Louisville-Jefferson County Medical Society Library. Inquiries concerning a particular book should be made to the KSMA Headquarters Office, 1169 Eastern Parkway, Louisville 17, Ky.

CLINICAL ENZYMOLOGY: by Gustav J. Martin, Sc.D., published by Little, Brown and Company, Boston.

STRABISMUS OPHTHALMIC SYMPOSIUM II: edited by James H. Allen, M.D., published by C. V. Mosby Company, St. Louis.

THE CHRONICALLY ILL: by Joseph Fox, M.D.; Published by Philosophical Library, Inc., New York, N. Y.; 225 pages; price, $3.95.

"The literature on the subject of prolonged illness has become voluminous beyond the possibilities of the interested reader. All the more reason for a compendium like this which extracts from such a mass a readable and useful treatise." This quotation is lifted from the introduction by E. M. Bluestone, M.D. The name of Dr. Bluestone has become synonymous with the evolution of the concept of meeting the multi-faceted challenge of managing long-term illness; in fact he is the father of the term "prolonged illness"; he popularized this in preference to "chronic" or "longterm" illness.

The author, Dr. Joseph Fox, has utilized freely the experiences of such men in developing his thesis. This particular volume attempts to approach prolonged illness from every aspect and he accomplished this task very successfully. Of particular note is a constant theme that is never lost sight of. This stresses the importance of the thought that the service must be molded to each person's individuality, rather than have the patient fit into a preconceived mass plan. The fact that prolonged illness and aging are very intimately related, is never lost sight of.

The author pays patricular attention to the sociological and the economic aspects of this type of illness. Statistical tables are interspersed throughout the text with a frequency only great enough to add some seasoning to the authors concept as it is unfolded. Under no circumstances can the most critical reviewer feel that these statistical references are a liability.

Certain medical classifications could have been better edited and there is a noticeable dereliction in proof reading. These, however, are very minor deficiencies and detract very little if any from the general excellence of the book. Certainly this text is a must for institutional planning. To him who is interested in community progress, the sociologic and economic impact of prolonged illness deserves profound study.

Max L. Garon, M.D.

DRUGS—THEIR NATURE, ACTION, AND USE by Harry Beckman, M.D., published by W. B. Saunders Co., London and Philadelphia, 1958; 728 pages; 126 figures; price, $15.

It is an adventure to view the landscape of Pharmacology from Harry Beckman's altitude. Order appears where another, less understanding, would find confusion, while the dense thickets of genuine chaos are frankly recognized. Our Medical School is justified in its pride at having launched so great a teacher. The complexities and the size of his presentation seem deceptively slight because it is so much fun to read what he has written. This is as far from ivory tower academic method as you can get.

The book is divided into three sections. Section I is a whimsical introduction. Section II introduces the general concepts and attitudes which Dr. Beckman has reached through his years of scholarly experience. Chapter 3, "The Sources of Drugs," is especially relation of structure with pharmacologic properties.

The bulk of the work is in Section III on Pharmacodynamics—six hundred twenty-six pages—sixty-seven chapters—of discussion of individual drugs, grouped according to their chief effects. As one must expect, this part of the book is not of perfectly uniform quality. Even so broad an authority as Dr. Beckman finds some subjects more interesting than others, and some drugs are treated less-than-critically. But every chapter contains useful information, and references are included which make easy the task of forming one's own conclusions.

The book is large, and too heavy for comfort as a "liber abdominalis." Avoidance of halftone illustrations has made possible the use of an unglazed paper. The type is legible, and the two-column format makes for fast reading. The many structural formulas add interest to the text.

This is a better textbook of Therapeutics than of Pharmacology. It is recommended unreservedly as a book for the physician's library.

Austin Bloch, M.D.

THAT DEGENERATE SPIROCHETE, by Oscar Daniel Meyer, M.D., published by the Vantage Press, New York, 1952, pp. 320, price, $5.

This book is not recommended to either physician or layman, being clumsily written and devoid of useful information. It also sets forth a variety of antiquated misinformation about syphilis, remind-

(Continued on Page 527)



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Reference: 1. J.A.M.A. 158:386 (June 4) 1955.

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PRESIDENT'S PAGE

(Continued from Page 518)

through its gifts to foreign countries and the various Plans of Foreign Aid.

(5) Our tax dollars are going into four organizations—The Export-Import Bank, The International Bank for Reconstruction and Development, The International Monetary Fund, and The International Finance Corporation—for the purpose of financing foreign nations and businesses.

The United States of America had better awaken. We citizens should demand that Congress again become the legislative branch of the Government. Our Congressmen must be Americans for America first. We, the citizens must elect Americans. What this country needs most is not the five-cent cigar, but Americans in Washington, D. C.

E. B. Wenrich M.D.

IN THE BOOKS

(Continued from Page 526)

ing one of certain European opinions of forty or fifty years ago on this subject.

The general manner of the book is admonitory and moralistic, and full of sentiment. Though one agrees with Dr. Meyer that education of young persons about venereal disease is of great importance, one would prefer not to offer them wild, unsupported statements like the following from Dr. Meyer's last chapter, "Sayings": "Venereal disease is a sin." "Recent research work has proved syphilis of acquired, congenital, or hereditary sources to be the direct cause of most chronic diseases of the eye. With this knowledge, one can look to syphilis as the cause of most chronic diseases of the remaining organs and structures of the special senses."

"The degeneration of the micro-organism causing syphilis forms, in all probability, a variety of micro-organisms which produce a multiplicity of diseases." (Among these he includes tuberculosis, furunculosis, influenza, rabies, leprosy, gonorrhea, diphtheria, chancroid, typhus, measles, arthritis deformans, mumps, whooping cough, inflammatory rheumatism, and many other diseases.)

"Syphilis is the most important cause of the degenerative diseases of the heart and blood vessels." "Syphilis outclasses in mortality rate all other diseases." "Syphilis is the most important direct and indirect cause of diseases of the skin."

Dr. Meyer's theory of the origin of many diseases in the degenerated spirochete of syphilis goes even further: "Spirochaeta pallida, the germ that causes syphilis, may be a part of the tail of the human spermatozoon and may have been formed by a degenerative process."

Oscar Bloch, Jr., M.D.

Investigator

after investigator repor

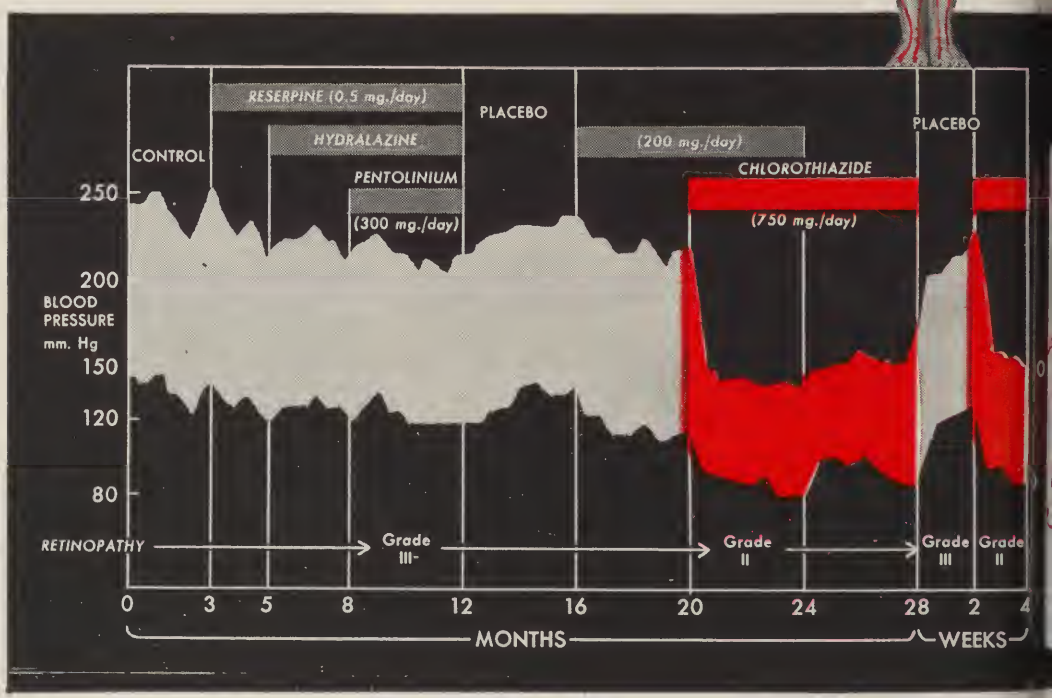
Wilkins, R. W.: New England J. Med. **257:1026**, Nov. 21, 1957.

"Chlorothiazide added to other antihypertensive drugs reduced the blood pressure in 19 of 23 hypertensive patients." "All of 11 hypertension subjects in whom splanchnicectomy had been performed had a striking blood pressure response to oral administration of chlorothiazide." ". . . it is not hypotensive in normotensive patients with congestive heart failure, in whom it is markedly diuretic; it is hypotensive in both compensated and decompensated hypertensive patients (in the former without congestive heart failure, it is not markedly diuretic, whereas in the latter in congestive heart failure, it is markedly diuretic). . . ."



Freis, E. D., Wanko, A., Wilson, I. H. and Parrish, A. E.: J.A.M.A. **166:137**, Jan. 11, 1958.

"Chlorothiazide (maintenance dose, 0.5 Gm. twice daily) added to the regimen of 73 ambulatory hypertensive patients who were receiving other antihypertensive drugs as well caused an additional reduction [16%] of blood pressure." "The advantages of chlorothiazide were (1) significant antihypertensive effect in a high percentage of patients, particularly when combined with other agents, (2) absence of significant side effects or toxicity in the dosages used, (3) absence of tolerance (at least thus far), and (4) effectiveness with simple 'rule of thumb' oral dosage schedules."



In "Chlorothiazide: A New Type of Drug for the Treatment of Arterial Hypertension," Hollander, W. and Wilkins, R. W.: Boston Med. Quart. **8**: 1, September, 19

MERCK SHARP & DOHME Division of MERCK & CO., Inc., Philadelphia 1, Pa.

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Hypertension

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3 **ADJUST DOSAGE OF ALL MEDICATION.** The patient must be frequently observed and careful adjustment of all agents should be made to determine optimal maintenance dosage.

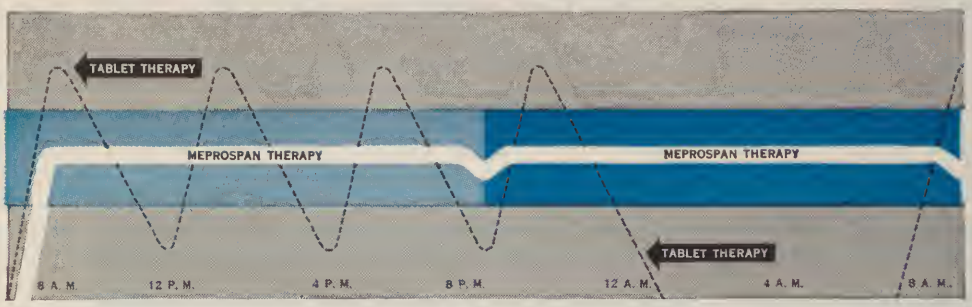
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quick nasal clearing—easy breathing within minutes . . . without rebound

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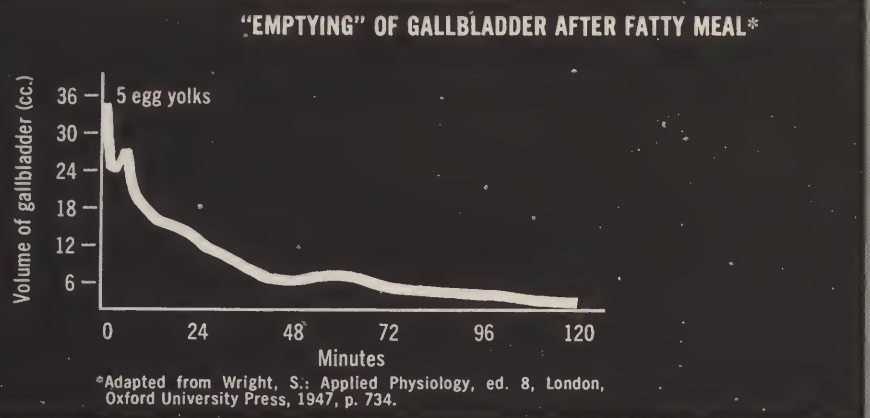
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Source—Lichtman, S. S.: Diseases of the Liver, Gallbladder and Bile Ducts, ed. 3, Philadelphia, Lea & Febiger, 1953, vol. 2, p. 1177.

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DECHOLIN® one tablet t.i.d.
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increases bile flow and gallbladder function—combats bile stasis and concentration... helps thin gallbladder contents.

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PUBLIC HEALTH PAGE

Viral Hepatitis

RUSSELL E. TEAGUE, M.D.
Commissioner of Health, Commonwealth of Kentucky

THE disease called epidemic infectious hepatitis has been known for thousands of years dating back to the writings of Hippocrates. In modern times both rural and urban areas have been affected by numerous epidemics of "infectious jaundice" and "catarrhal jaundice." During wartime, particularly, the disease has reached tremendous proportions among troop concentrations and armies fighting the Napoleonic Wars, American Civil War and both World Wars were severely affected.

During World War II another type of hepatitis caused by a *different* virus was recognized when more than 50,000 cases of jaundice appeared following injection of yellow fever vaccine containing human serum. Because of this, much work was done in a short time to determine the cause, mode of infection and spread and clinical aspects of viral hepatitis. Following this, hepatitis also became a reportable disease. Kentucky physicians began reporting the disease in 1950 and the following figures have been compiled to the present:

1950	1951	1952	1953	1954
8	118	1954	924	1004
1955	**1956**	**1957**	**1958 (to date)**	
362	544	788	279	

Terminology of classification has caused considerable confusion; "serum hepatitis," for example, is a poor term, since *both* types of virus may be transmitted by parenteral injection. In order to avoid confusion, hepatitis is now classified etiologically:

I. VIRUS A (I.H.): Responsible for infectious hepatitis. The hepatitis A syndrome has an incubation period of approximately ten to fifty days, with average of about twenty-five days. Two forms are produced: *icteric and non-icteric.* In childhood the disease is usually milder and of short duration and is often so mild as to escape notice entirely. The majority of childhood cases are *non-icteric.* For this reason it is often difficult to isolate source(s) of infection. In adults the course of the disease is much more characteristic and is usually diagnosed on the basis of history and physical examination.

II. VIRUS B (S.H.): This agent accounts for the illness formerly called homologous serum jaundice, transfusion jaundice, postvaccinial jaundice, et cetera. It usually has an incubation period of six weeks to six months and is usually of insidious onset with a prolonged prodromal period. It is usually more severe and of longer duration than that caused by the A virus.

Epidemiology

(A) Available evidence suggests that the A virus occurs throughout the world. Up to the present, the lack of a susceptible laboratory animal and of specific serologic tests greatly handicaps the solution of many problems associated with the disease.

Evidence to date points to the fecal-oral route of transmission of Virus A Hepatitis. Attempts to demonstrate the virus in nasopharyngeal secretions have been unsuccessful. The duration of infectivity in the feces of the acute case is not known, and although the existence of chronic fecal carriers has recently been demonstrated, their importance in dissemination remains undetermined. During the incubation period and the acute phase of the illness the virus is present in the blood, so that transmission via contaminated instruments, blood and plasma can also occur. While epidemics of hepatitis A have resulted from fecal contamination of water and food, the most common mode of spread is from person to person where it is difficult to distinguish between fecal-oral and oral-oral route.

Institutional, military and family outbreaks are most frequently described, although the usual experience in this area is a straggling rather widespread outbreak in rural and urban areas involving many individuals over the course of two to four months.

The prevalence of epidemics of the A virus is in the autumn and early winter, with a decline in the late spring and summer. It is primarily a disease of *school-age children,* with children under 15 years of age most susceptible.

Control consists mainly of good personal and community hygiene. Human gamma globulin is of great value in the prophylaxis of infectious hepatitis when given during the incubation period, and is known to be effective even when given as late as six days before the expected date of onset. It has been well established that the administration of gamma globulin to household contacts of known cases results in a marked decrease of secondary cases.

(B) The virus of hepatitis B also appears to be widespread throughout the world. It remains present in the blood of patients for long periods of time and has been demonstrated in symptomatic carriers at intervals in excess of five years. Disease is produced only through parenteral inoculation. Adequately sterilized instruments can easily control some of the spread. Certain products of human blood (gamma globulin, antihemophilic globulin and albumin) are

(Continued on Page 596)



The non-narcotic analgesic with the potency of codeine

DARVON (Dextro Propoxyphene Hydrochloride, Lilly) is equally as potent as codeine yet is much better tolerated. Side-effects, such as nausea or constipation, are minimal. You will find 'Darvon' helpful in any condition associated with pain. The usual adult dose is 32 mg. every four hours or 65 mg. every six hours as needed. Available in 32 and 65-mg. pulvules.

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Each Pulvule 'Darvon Compound' provides:

'Darvon'	*32 mg.*
Acetophenetidin	*162 mg.*
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From the Files of the

Committee for the Study of Maternal Mortality

CASE No. 2: A 38-year-old para 9, gravida 10, was admitted in labor at term. Her prenatal course had been normal as well as could be determined. She consulted her physician only once during the pregnancy, in the eighth month. At this time her condition was good.

Labor began spontaneously and lasted approximately two hours. She delivered twins one hour after admission to the hospital. Both babies delivered spontaneously. No excessive bleeding was noted at the time of delivery, and the patient was returned to her room in apparently good condition.

About three hours post partum the nurse discovered that the patient had and was bleeding excessively and profusely. The physician was called and returned to the hospital with his associate. The patient was returned to the delivery room and examination revealed a laceration of the cervix that extended into the lower uterine segment. Note was made that the cervix was sutured but no mention was made of any attempt to manage the lower segment laceration. During suture of the cervix, the patient went into shock.

Treatment consisted of intravenous glucose, five pints of blood and external heat. Bleeding seemed controlled at times, but hemorrhage recurred. The patient was semi-comatose intermittently and appeared to improve at times.

She expired approximately 16 hours after delivery.

Following the hemorrhage, multiple drugs were given, including adrenal cortex extract, cortisone, vitamin B, premarin, adrenaline, coramine, caffeine sodium benzoate and digitalis.

Comment

In the discussion of this case, the committee gave consideration to the fact that it occurred in a small town where specialized consultation was possibly not available. It was brought out, however, that major surgery is performed in the institution in which the patient was hospitalized.

The committee concluded from its study that this death occurred from a laceration that produced in effect a rupture of the uterus that was unrecognized. It was felt that, under ideal conditions and ideal management, the course of events might possibly have been altered had laporotomy been performed early in the course of the uncontrolled hemorrhage and repair of the laceration or hysterectomy performed.

CASE No. 3: A 25-year-old white gravida 3, para 2, was due by menses on February 8, 1957. She was seen in the second month of this pregnancy and made ten prenatal visits. Her course had been normal and uneventful, with a 27 lb. weight gain. Her previous labors were short. One in 1951 lasted two hours, and in 1952 she had a labor of one and one-half hours. The babies weighed 6½ and 5 lbs. 3 ounces, respectively.

In 1955 the patient had a unilateral salpingo-oophorectomy, myomectomy, and appendectomy.

On January 24, 1957, labor was induced by artificial rupture of membranes and intramuscular pitocin (amount not stated). Labor lasted 2 hrs. and 9 mins. Presentation was cephalic, delivery was spontaneous under nitrous oxide anesthesia. No complication of delivery was noted, except that it was quite rapid. The baby was in good condition. Birth weight was 5 lbs. 15½ ounces.

The patient was returned to her room. Consciousness from the anesthetic rapidly returned and the patient talked with her husband and her physician before they left the hospital.

About one hour post partum, sudden severe external vaginal bleeding occurred. The physician was called at home and returned promptly to the hospital after ordering that the patient be returned to the delivery room.

Attempts at intravenous therapy were unsuccessful because of collapsed veins. When the physician returned to the hospital, the patient was moribund and death occurred about 45 minutes after onset of hemorrhage. There had been no abnormal bleeding at the time of de-

(Continued on Page 598)

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1. Russek, H. I.: Postgrad. Med. *19*:562 (June) 1956.

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Riseman, J. E. F., Altman, G. E., and Koretsky, S.: Nitroglycerin and Other Nitrites in the Treatment of Angina Pectoris, Circulation (Jan.) 1958.

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WASHINGTON NEWS DIGEST



Washington, D. C.—The Hill-Burton program for U. S. grants to states to help build hospitals and other health facilities has run a successful course for almost 12 years. It has never been cut back in scope, and once (in 1954) it was expanded to take in diagnostic-treatment centers, nursing homes, chronic disease hospitals and rehabilitation centers.

On the overall, the U. S. puts up one-third of the money for a state's projects, but the state may give individual projects as much as two-thirds of their costs.

In the 12 years, 3,725 projects have been completed, are under construction or have been approved. They represent a total investment of about $3 billion, just under one-third of it federal money. Included are 156,658 hospital beds, 4,542 nursing beds, and almost 1,000 other facilities, such as rehabilitation centers.

Congress, as it has several times in the past, now is being asked to renew the program, which no doubt it will do. Also, the Department of Health, Education, and Welfare and several organizations in the health fields have looked over the 12 years' experience, and want some changes made in the way the program is handled. None of them, however, wants to end it.

The American Medical Association, for example, is suggesting that diagnostic-treatment and public health centers be dropped from the program, and that the mandatory emphasis on rural communities also be eliminated. These and other AMA recommendations are the result of a 14-state survey by the association.

Also, the AMA joins with the Department of Health, Education, and Welfare in proposing that emphasis be placed on facilities for the chronically ill and nursing homes, and that states be given more freedom in shifting money among the various categories.

Both the AMA and the AHA want Congress to authorize loans for hospitals and nursing homes, with the AMA recommending that loan guarantees be offered to proprietary as well as nonprofit institutions.

Before Congress are a dozen or more other suggested changes. Several groups want the research fund raised from the present $1.5 million a year to $4 or $5 million, and HEW would like to be able to advance money for planning when this action would hurry construction. HEW also, along with several Congressmen and state medical societies, would like to see the eligibility requirements eased so more nonprofit groups can build diagnostic-treatment centers. Another HEW proposal would recognize a rehabilitation center even if it did not furnish psychological, social and vocational evaluation services, as well as medical; now the center has to furnish all four services.

At this writing, indications are Congress will not allow a slip-up in extending the program, which is scheduled to expire June 30, 1959, even if it has to move along a simple extension bill, then try to work out agreement on all the suggested changes.

Regardless of what happens, Hill-Burton is undergoing more friendly—but critical—examination than it has experienced since its birth in 1946.

NOTES:

American Association of Medical Colleges estimates that the country's 85 medical schools will require $275 million for rehabilitation and new construction in the next few years, not including money for research and hospital construction.

To learn how far our supplies could be stretched in event of nuclear attack, the Office of Defense Mobilization has asked Public Health Service to survey 700 wholesale drug houses, surgical supply firms and chain drug store warehouses for an inventory of their stocks.

American Medical Association, among other groups, is supporting legislation that would request President Eisenhower to call a 1960 White House Conference on the problems of the aged. However, HEW sees no need for the conference, nor does it favor suggestions that a new bureau be set up to handle the problem, nor a commission created.

After conclusion of hearings, a House subcommittee has under consideration legislation for "bricks-and-mortar" U. S. grants to help medical and dental schools finance buildings and purchase of equipment; money could not be used for general operating expenses.

Dr. Thomas H. Alphin has resigned as director of AMA's Washington Office to become associate medical director of the Equitable Life Assurance Society at the group's main office in New York. Dr. William J. Kennard, deputy director, has been named acting director of the Washington Office.

VA is calling for bids on 12 construction projects estimated to cost a total of at least $4.2 million. Locations include Murfreesboro, Tenn.; Tomah, Wis.; Columbia, S. C.; Bay Pines, Fla.; Newington, Conn.; Iowa City, Iowa; West Roxbury, Mass.; Rutland Heights, Mass.; Walla Walla, Wash.; Wood, Wis.; Wadsworth, Kan.

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*Reports to the Squibb Institute for Medical Research

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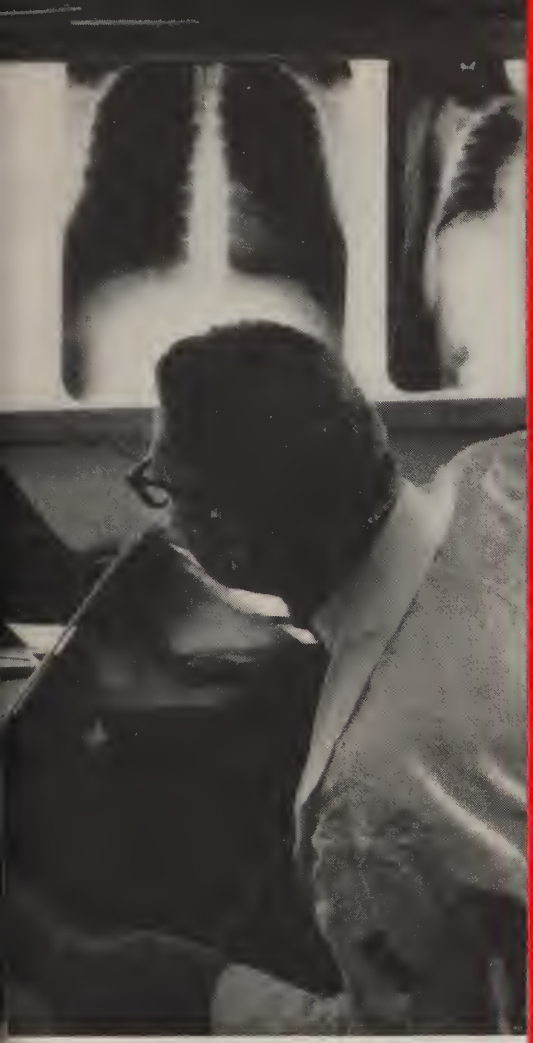
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- **In ordinary dosage does not reduce normal muscle strength or reflex activity.**[6]

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CONDITION	NO. PATI
STUDY 1[1]	
Skeletal muscle spasm secondary to acute trauma	3
STUDY 2[2]	
Herniated disc	3
Ligamentous strains	
Torticollis	
Whiplash injury	
Contusions, fractures, and muscle soreness due to accidents	
STUDY 3[5]	
Herniated disc	
Acute fibromyositis	
Torticollis	
STUDY 4[6]	
Pyramidal tract and acute myalgic disorders	
TOTALS	1



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	RESPONSE		
marked"	moderate	slight	none
26	6	1	—
nounced"			
25	13	—	1
4	4	—	—
3	—	—	—
2	1	—	—
3	2	—	—
xcellent"			
6	2	—	—
8	—	—	—
—	—	1	—
nificant"			
27	—	2	1
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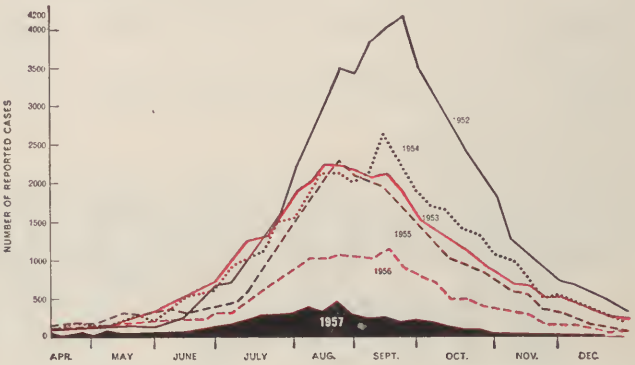
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1. *J. A. M. A.*, 165:21 (*November 23*), *1957.*
2. *Department of Health, Education, and Welfare: News Release, October 10, 1957.*



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Intussusception In The Adult With Particular Reference To Intussusception Of The Sigmoid Colon*

WILLIAM H. HAGAN, M.D.F.A.C.S.** AND GEORGE B. SANDERS, M.D.F.A.C.S.
Louisville, Ky.

INTUSSUSCEPTION is primarily a disease of infants and children. It is the most common cause of intestinal obstruction in childhood and is second only to appendicitis as a cause of acute abdominal emergency after the first month of life. Though less common in adults, it does occur with significant frequency. Probably less than ten percent of cases of intussusception occur in adults and some series report the incidence as low as three percent. The available literature on intussusception in children is voluminous and excellent reviews of fairly large series are available. References to intussusception in adults are more sparse. Donhauser and Kelly reviewed the American and English literature from 1900 to 1947 and reported 665 cases of intussusception in adults to which they added 12 cases.[12] Roper, in 1956 reviewed the period from 1947 to 1952. During this interval, 112 cases were reported to which he added an additional 12.[44] Aside from the material reported in these two papers, we have noted case reports in other articles bringing the total to date to approximately 1100 cases of acute intussusception in adults; 86 of these occurred in the sigmoid colon. [1–3,5,7,9–11,13–17,21–25,27–29,32–39,41,45,47,48]

The purpose of this paper is three-fold. First, to review briefly the differences between intussusception in children and adults. Second, to call attention to the clinical features and problems of treatment of acute intussusception of the sigmoid, and third, to recognize that chronic, idiopathic, intermittent intussusception of the sigmoid in adults probably occurs more frequently than is appreciated.

Difference Between Intussusception in Children and Adults

1. Incidence.

Summarizing six large series of cases of intussusception in children, Orloff[37] found that eighty percent of these occurred under two years of age. Intussusception is infrequent in the newborn, but from the third month on the incidence rises. Sixty-nine percent of cases occur during the first year and an additional eleven percent during the second year. In adults, considering all types of intussusception, Donhauser and Kelly[12] found that two-thirds of cases occurred before the age of 45. In both adults and children, the condition occurs twice as often in males as in females.

2. Etiology.

In ninety-five percent of cases in children, no specific cause for the intussusception will be found. In adults, by contrast, eighty percent are due to some specific organic lesion. In the small percentage of children in whom some organic lesion is present, in three percent this proves to be a Meckel's diverticulum, in one percent a benign polyp, in three-tenths percent duplication of the bowel.[37]

In adults with known organic cause for intussusception, Donhauser and Kelly[12] found that forty-four percent were due to benign neoplasm, twenty-six percent to malignant neoplasm and the remainder to other causes including Meckel's diverticulum.[12] In the later review reported by Roper,[44] thirty-six and six-tenths

*From the University of Louisville, School of Medicine, Department of Surgery.
**Deceased

percent were due to malignant tumors and thirty-one and three-tenths percent due to benign tumors.

3. Types of intussusception.

Intussusceptions are best classified by naming first the intussusceptum or the invaginating portion of the bowel followed by the intussuscipiens or receiving portion of the bowel. The several possible varieties of intussusception confined to the small intestines are grouped under the term enteric. The corresponding term for intussusception of one portion of the colon to another is colocolic. Several possibilities are also present in the region of the ileocecal valve. These are: the ileocolic in which the ileum is the leading point into the colon, the ileocecal in which the cecum is the leading point bringing the ileum with it. Clinically, these are often indistinguishable. Double intussusceptions may occur, such as the ileo-ileocolic. This begins as an ileo-ileal intussusception, the entire mass then invaginating into the colon. It is also possible to have more than one area of the intestinal tract involved in intussusception at the same time. Intussusception may also occur through the pylorus, through gastroenterostomies and occasionally in small bowel in retrograde direction. One of the most unusual cases recorded was that reported by Coleman in 1941.[7] This case had an intussusception of the jejunum which at one point showed nine layers, that is, the intussusception was compounded four times.

The most common type in children is the ileocolic, accounting for ninety-one percent of cases. Of the remainder, six percent are enteric and three percent colocolic. In adults, intussusception more commonly involves small bowel only; the enteric variety represents forty-one percent of the total, ileocolic twenty-eight percent and colocolic twenty-one percent.[12]

4. Duration of symptoms.

The symptoms of acute intussusception in children are well known; crampy, intermittent abdominal pain, vomiting and rectal bleeding occur in the majority of cases. Of great importance in children is the relationship between the duration of symptoms and the mortality rate. The mortality rate rises sharply after the first twenty-four hours. The necessity for definitive early treatment is probably the most important single fact to be stressed in a discussion of intussusception in children. In adults, by comparison, the disease is extremely variable. The acute episode leading to surgery is often preceded by intermittent bouts of crampy abdominal pain and symptoms suggesting partial intestinal obstruction over a period varying from days to years. These preceding attacks may be mild and the complaints vague. The underlying cause often escapes diagnosis until an acute episode occurs.

5. Reducibility.

Intussusception in children seen within twenty-four hours of onset of symptoms is usually reducible by taxis at surgery or often by hydrostatic pressure with barium enema under fluoroscopic control. Of those cases coming to surgery, approximately fourteen percent will be found to be irreducible. It is in this group of children that the problem of treatment has been most difficult with mortality rates discouragingly high. In the past, mortality rates of from fifty to ninety-four percent have been reported with attempts at resection and primary anastomosis under these conditions. By employing a Mikulicz type resection, Gross[18] and others have more recently been able to reduce substantially these mortality figures. The adult who, after a longer history of intermittent bouts of intussusception finally comes to surgery, is more apt to have an incomplete obstruction. It would appear from the literature that over half of these cases are irreducible at operation. Fortunately, the adult with this form of obstruction is not as critically ill as the child and withstands surgical treatment better.

6. Treatment.

In childhood intussusceptions, many Australian and, more recently, American authors, advise that during the first twenty-four hours, gentle attempts at reduction by hydrostatic pressure, wih barium enema under fluoroscopic control is advisable. Others point out the hazards associated with this method of treatment, and most all agree that if it is not promptly successful, if there is any question of incomplete reduction, if an organic lesion is suspected or if the child is seen more than twenty-four hours after the onset of symptoms, prompt exploratory laparotomy is indicated.[4,6,8,20,26,40,42,43,46] If reduction by taxis is possible, no further procedure is performed unless an organic lesion is present. If the intussusception is irreducible, despite the fact that in a small series of cases Dennis[11] has demonstrated that resection and primary anastomosis is possible in children without prohibitive mortality, most surgeons agree

with Gross that a Mikulicz type resection is the safest in most hands.

No attempt should be made to reduce intussusception in the adult by barium enema. Because of the high incidence of associated malignant lesions and the greater likelihood of an irreducible intussusception, the treatment is surgical. If reduction is possible, treatment becomes that of the underlying cause. Simple excision of benign tumors may suffice. When the primary cause is malignant neoplasm, adequate cancer surgery, of course, is indicated. If the lesion proves to be irreducible and is located in small bowel, resection with primary anastomosis is the procedure of choice. The treatment of irreducible intussusceptions of the colon will be considered in our discussion of intussusception of the sigmoid which follows.

Acute Intussusception of the Sigmoid Colon

1. Incidence.

As mentioned above, review of the literature has indicated that over 1100 cases of acute intussusception in adults have been reported. Of these, only 86 occurred in the sigmoid. Review of these 86 cases and 3 additional cases which we have encountered[50] yields the following information about acute intussusception of the sigmoid colon. The youngest patient was thirty-one and the oldest eighty-eight; the average age was sixty-two. Thus, intussusception of the sigmoid is more apt to occur in an older age group than other types of intussusception in the adult. Whereas other types of intussusception in the adult and in children are more common in the male, intussusception of the sigmoid is somewhat more common in females than males, occurring in a ratio of 1.7 to 1.

2. Etiology.

One of the most important facts to point out in this discussion is that over half, i.e. fifty-four percent, of these cases are found to be associated with carcinoma; eight percent are due to benign lipoma and six percent to benign polyp. Of interest relative to our subsequent discussion of chronic, idiopathic intussusception of the sigmoid is the fact that in thirty-two percent no specific cause will be found.

3. Duration of symptoms.

The shortest history was of two hours duration and the longest one year. Approximately one-half of the cases had fairly acute symptoms of less than one week duration. The rest had more chronic symptoms preceding the acute attack, usually by six weeks to six months.

4. Diagnosis.

Diagnosis was made or suspected on the basis of one of the following findings: Rarely was there a palpable abdominal mass. In one-fifth of the cases the intussusception protruded through the anus. In some of these, when a tumor was present, the neoplasm itself protruded through the anal sphincter and was available for direct biopsy. In sixty percent of cases the intussusception was palpable on rectal examination. When the mass was not palpable per rectum, in some it could still be visualized through a sigmoidoscope. A few were diagnosed by barium enema. Occasionally, only evidence of sigmoid obstruction was apparent on X-ray examination and diagnosis was made by exploratory laparotomy. The obstruction associated with this lesion was apt to be incomplete. Approximately two-thirds of the cases were reducible at the time of operation.

5. Treatment.

The most popular operation in the earlier cases was the Paul-Mikulicz type resection. When adequate mobilization is difficult due to any cause, this type resection is not satisfactory. Obviously, an irreducible sigmoido-rectal or sigmoido-anal intussusception cannot be handled in this manner. In more recent years, resection with end-to-end anastomosis has been performed with and without preliminary transverse colostomy. In addition, the technique of intracolonic resection has been described.[1] In this technique, an incision is made into the bowel distal to the intussusception and the intussusceptum is delivered through this opening, amputated and the resultant edges closed by suture within the lumen of the distal bowel. The serosal surfaces at the intussuscepting point are also approximated and the incision into the distal bowel closed.

Although a modification of this procedure as described by Nygaard[36] may be useful in irreducible ileocolic intussusception, it has two definite disadvantages in the sigmoid region. The resection is in no sense adequate if a malignant lesion is present and a partial obstruction is produced at the point of intussusception. It would appear to us that the treatment of choice would consist of primary resection and anastomosis if conditions permit. If the general condition of the patient is precarious, if proximal distention or edema in the area to be resected

are sufficient to justify concern, if the intussusception is irreducible or if the surgeon fears resection in the face of unprepared bowel, a proximal transverse colostomy followed later by a definitive resection is in order. It is of interest that an irreducible intussusception will usually become reducible or may reduce spontaneously following proximal colostomy. It is, of course, of primary importance to determine whether or not a malignant lesion is present before deciding upon definitive treatment.

Chronic Idiopathic Intussusception of the Sigmoid

Chronic, idiopathic intussusception of the sigmoid colon is probably considerably more common than the acute variety discussed above. Although this has been described repeatedly in most text books on diseases of the colon and produces fairly typical symptoms, it has no associated organic cause and usually is not apparent on routine sigmoidoscopic or barium enema examination; therefore, it not infrequently goes undiagnosed. This condition was described seventy-four years ago by Wellingham and has more recently been reviewed by Granet.[16] Presumably, the walls of the rectosigmoid being fixed to the pelvis allow a redundant, mobile sigmoid, with an unusually long mesentery, perhaps led by a fold of mucosa and propelled by peristalsis, to prolapse into the rectosigmoid forming an intussusception. This may proceed into the lower sigmoid, into the rectum or may even protrude from the anus. These attacks may occur repeatedly and reduce spontaneously. They are accompanied by vague abdominal complaints suggesting partial obstruction and often some degree of tenesmus.

Granet describes the condition thus: "In this syndrome characteristically, a sense of unsatisfactory and incomplete evacuation remains after defecation. There is a feeling that something remains that should be expelled. Consequently, the patient sits and strains inordinately. This aggravates the tendency to intussusception. As a result of its frequent descent and recession, congestion and superficial erosion of the mucosa at the apex of the intussusception occurs to result in the discharge of glary or even bloody mucus. A heavy, dragging sensation in the pelvis and in the lumbo-sacral region may be present together with a dull, aching pain referred to the perineum and down the thighs. These patients become chronic laxative takers and secondary symptoms often result from this habit."

Unless visible by protrusion through the anus, or palpable on rectal examination, this condition may be easily overlooked because sigmoidoscopic examination in the usual position, or barium enema results in such a rapid reduction. Diagnosis is accomplished, however, by sigmoidoscopic examination in the Sims position having the patient strain as the scope is withdrawn. The intussusception may be seen to occur and to follow the scope into the rectum or through the anus. Minor degrees of this phenomenon are common and are considered physiological.

The mechanical aspects of sigmoido-rectal intussusception make successful medical treatment rather difficult. Granet[16] suggests that these patients may be benefitted by relieving anxiety over cancer, by a high protein, high vitamin, low roughage diet, elimination of cathartics, the use of a hydrophilic preparation such as methylcellulose to produce a large, soft stool, avoidance of straining at stool; if necessary, the use of small enemas in the Sims position, mild sedation, antispasmodics, etc. In severe, intractable cases and where it appears that incarceration may occur, surgical intervention is justificd. Resection of the redundant sigmoid or attempts at fixation of the sigmoid to the lateral pelvic wall and obliteration of the pouch of Douglas may be considered.

Summary

First, the differences between intussusception in children and adults have been reviewed. More than ninety percent of cases occur in children under fourteen years of age. In children, the condition is usually idiopathic, whereas in adults, it is more commonly associated with an organic lesion. In children, the ileocolic variety predominates, whereas in adults, distribution of types is more evenly spread although the enteric variety predominates. The condition in children is acute and mortality rises sharply after the first twenty-four hours. In adults, intermittent symptoms may occur over a long period of time before an acute episode brings the patient to surgery. Primary resection and anastomosis where feasible is the treatment of choice in adults for irreducible intussusception, whereas in children, a Mikulicz type operation is probably safer.

Second, acute intussusception of the sigmoid

colon has been described. This was found to occur in an older age group than other types of intusssuception, to be more common in females, to be associated in over half the cases with carcinoma of the sigmoid. The duration of symptoms varied considerably. Diagnosis was made by physical, sigmoidoscopic or X-ray examination and the treatment of choice is primary resection with end-to-end anastomosis with or without preliminary transverse colostomy.

Third, chronic, idiopathic intussusception of the sigmoid is described. This is a condition which may produce vague symptoms over a long period of time. The patients are often misdiagnosed as having colitis, spastic colon, etc. Barium enema and sigmoidoscopic examination in the usual manner are negative. Diagnosis is obtained by having the patient strain during sigmoidoscopic examination in the Sims position. Treatment has been discussed.

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Do not trust all men, but trust men of worth; the former course is silly, the latter a mark of prudence.
—Democritus

Malignant Tumors of the Eye Region

James Lee Stambaugh, M.D.
Lexington, Ky.

RATHER than catalogue all the malignant tumors of the eye region, I have selected a few of the more common ones, and will briefly mention some of the important features of each. This subject matter can be grouped into three general divisions —malignant tumors of the lid and conjunctiva, of the eyeball, and of the orbit.

Lid and Conjunctiva

Most epitheliomas of the eyelids are either basal cell (85 per cent) or squamous cell. They are four times more common on the lower than on the upper lids. Rarely, epitheliomas arise from the various local glands and hair follicles. Occurring usually in persons around age 50, they tend to begin at the point of transition from epidermis to conjunctiva, hence at the lid margin. The tumor presents as a discrete, indurated nodule with irregular surface, which becomes glossy, infiltrated with telangiectases, and finally centrally ulcerated. Untreated, it widely infiltrates the tissue, and erodes eye and bone. The squamous cell varieties metastasize to the regional lymph system. Chronic irritation seems to predispose to their formation; therefore, a recurring or persistent chalazion is suspect, sometimes necessitating a block resection of the lesion to make certain malignancy has not developed. Although many epitheliomas are successfully treated by radiation, this method should be reserved for the long-neglected situations. In most cases primary surgical resection is preferable, and with careful attention to anatomic details, good plastic and functional results are possible.

Nevi are the most frequent conjunctival tumors and one of the commonest of the skin and lid margins. The usual site is at or near the limbus in the interpalpebral region. One-third are not pigmented and these have a salmon-pink color. While not malignant in themselves, they rarely develop into malignant melanomas, which require radical surgery. Nevi frequently become more pigmented at puberty. Increased pigmentation at any other time of life, growth, or inflammation in or around them are indications for complete removal. Patients sometimes become quite anxious about these brown spots on their eyes, and in such situations simple removal with pathologic examination and reassurance is best.

Cancerous melanosis of the conjunctiva or adjacent skin arising either spontaneously or from precancerous melanosis is far more frequent (ten to fifteen times[1]) than the transition of a benign nevus to a malignant melanoma. The benign appearance of these lesions, and their characteristic of sometimes showing temporary, spontaneous pigment regression, belie their gravity, for they are the most dangerous tumors arising on the eye surfaces or adjacent skin. The tumor may be so diffuse as to involve almost all the conjunctiva and contiguous skin, yet show no elevation. This is in contrast to nevi, which are almost always slightly elevated and have an irregular surface. Congenital melanosis of the conjunctiva must also be differentiated. These lesions, like nevi, are present from birth, show no change, are generally discrete, and are not more heavily pigmented at the limbus, as cancerous melanoses are wont to be. Experience has shown that treatment in the past has not been sufficiently aggressive. In the precancerous stage, they may be treated by radiation, but once they are in the cancerous stage (as they frequently are when apprehended), exenteration of the entire orbital contents seems to be the only chance for cure.[2]

Intraocular Tumors

I shall mention only the two most common primary intraocular tumors: one is the retinoblastoma; the other, the malignant melanoma. Retinoblastomas occur in children usually before school age and are bilateral in one-third of the cases. These tumors, arising from the retina, grow either beneath it or out into the vitreous, and frequently seed to other points within the eye. There is a definite hereditary tendency. Usually they are discovered relatively late, after the tumor has filled a good portion of the eye, to give a white pupil reflex which the parents notice. Or again, because the tumor grows into the visual axis, that eye may cross, to give the first clue. For this reason alone, I want to emphasize that any child who has crossed eyes should be examined immediately and thoroughly. It is courting disaster to wait or advise waiting, as is sometimes done, when the eye may be harboring a lethal tumor. A

rarer first sign, pupillary inequality, should always arouse suspicion. The larger growths can be seen inside the eye with only a flashlight. Ophthalmoscopy reveals a creamy-pink mass over which course new blood vessels. If the tumor has grown beneath rather than in front of the retina, only a retinal detachment will be seen. A most important feature in the differential diagnosis is the detection of calcium deposits in the tumor by either direct examination or by roentgenogram. In later stages, glaucoma, intraocular hemorrhage, and cataract may ensue to confuse the picture. As the neoplasm is far-advanced when apprehended, the treatment is removal of the eye, taking pains to secure a long optic nerve, as extension back through and along the nerve to the brain is one of the chief modes of death.

If a tumor is found in the fellow eye, frequently it will be sufficiently small to treat with X-radiation, alone or combined with triethylene melamine, with which recent results have been better.[3] About fifty per cent die within one year of discovery, most commonly because of intracranial extension, less frequently because of long bone and organ metastasis. Any child who has had a retinoblastoma in one eye should be examined often and carefully for evidence of tumor in the fellow eye, for early treatment is the key to vision and survival.

Malignant melanomas generally occur after the age of forty, and are exceedingly rare in Negroes. As the tumor grows in the choroid from which it arises, it is restricted by the lamina vitrea of that structure, finally breaks through it, and extends into the vitreous as a globular mass, which pushes up the retina before it. In such a classical situation, it appears in the fundus as a round, smooth, brownish-gray mass covered by an intact retina. It may be discovered accidentally in the course of a routine examination, or it may reveal itself indirectly through its complications, such as glaucoma, uveitis due to necrosis, cataract, intraocular hemorrhage, or retinal detachment with its consequent visual field defect which intrudes on the patient's awareness. An extraocular extension may be evident as a nodule on the sclera; larger extensions cause orbital cellulitis, proptosis, or both. Treatment is prompt removal of the eye, and of the orbital contents if extraocular extension beyond the capsule has ensued. Radiation is of no value.

Because malignant melanomas tend to arise in internally irritated eyes, there is good argument for removing all useless, disfiguring globes, especially if phthisical and chronically inflamed. Lethality of malignant melanomas depends upon cell type, of which there are four, and argyrophil fiber content, those having less being more deadly. For all tumors combined, metastasis kills one-half within five years, and two-thirds within ten. It has been reported up to 35 years after enucleation. The average time for such foci to appear is about three years, the liver being the most common site. In fatal cases, death ensues on an average of four years after enucleation. Similar tumors arise in the ciliary body and iris, but they are relatively quite rare.

Orbital Tumors

A few general points about orbital tumors are in order. Regardless of the type, the major symptoms and signs of orbital neoplasms are: (1) proptosis due to increased orbital mass, (2) diplopia due to limited ocular motility and displacement, (3) visual loss, and (4) pain, which usually occurs late.

The direction of proptosis gives a good clue to the location of the mass, suggesting the surgical approach. Tumors arising within the muscle cone will produce proptosis directly forward and cause earlier visual loss due to direct damage to the optic nerve. Those outside the cone incite displacement of the globe in a forward and opposite direction and those anteriorly situated are readily appreciated by palpation. Inspection and palpation are of paramount importance in examination, for often the little finger may be slipped around the eyeball to locate a mass.

One must be cautious in diagnosing orbital masses, as deception can result from: (1) hyperthyroidism, which is the commonest cause of unilateral exophthalmos; (2) ptosis or Horner's syndrome of the opposite side; (3) bony orbit and facial asymmetry, due to either (a) common congenital inequalities in contour or (b) acquired inequalities arising from therapeutic radiation of the head region during the first years of life; and (4) unilateral high myopia (long a-p dimension of the eyeball). A bit of alertness will usually avoid these embarassing pitfalls. Actual measurements with an exophthalmometer are indispensable for detecting change in suspected cases. As we shall

see, diagnostic roentgenograms can be quite helpful. Some of the following tumors are not malignant in the sense of killing by metastasis, but left untreated they will produce blindness and eye or brain destruction:

Hemangioma is the commonest primary orbital tumor. Most of these are of the cavernous variety, and appear in early life. Intermittent leakage from the tumor may cause visible ecchymoses. Also aiding in the diagnosis are the variable degree of exophthalmos, depending on compression and venous stasis, and the frequent X-ray finding of calcification in the fibrotic areas of the tumor. Biopsy or aspiration is risky, as hemorrhage can be brisk. As therapeutic X-radiation in early life can cause considerable impairment in bony development, surgical removal is the preferable method of treatment.

Of gliomas, 75 per cent become apparent in the first decade of life. They are usually seen as a very slowly progressing, painless, unilateral exophthalmos with failing vision. Bilateral involvement occurs either due to spread through the optic chiasm or due to multiple origin. Because they arise from the glial structure of the nerve itself, visual loss is earlier than in other types of orbital tumors. Optic atrophy or papilledema may be seen. Optic foramen enlargement shown by roentgenogram is helpful in making the diagnosis. These tumors are radio-resistant, so the only treatment is excision, the technique depending on their extension. Interestingly enough, a number of patients have apparently been cured or survived twenty or more years when the glioma has been knowingly incompletely removed. Gliomas of one or both optic nerves sometimes occur in association with von Recklinghausen's disease, usually in cases showing only minor peripheral manifestations.

The average age of persons in whom meningiomas arise is forty years. The tumors are often manifestations of extension into the orbit from an intracranial origin. It is a curious fact that despite their contiguity with the optic nerve, visual impairment is very late in many instances. When occupying the superior orbital fissure, they cause the orbital apex syndrome, with involvement of the first division of the trigeminal nerve, and a more or less complete ophthalmoplegia. Irradiation is of no value. The management of both gliomas and meningiomas depends on their intracranial component, if any. Purely orbital involvement is handled by surgical removal through a modified Krönlein approach; otherwise, a neurosurgical attack is used, in which the orbit is unroofed to gain its entry. This latter technique is the usual requirement for meningiomas.

Of lacrimal gland tumors, mixed tumors constitute the majority. They encompass an extremely pleomorphic group, and while closely related to similar neoplasms of the salivary glands, they carry a poorer prognosis. They may occur at almost any age, although middle age is the commonest time. Growing rather slowly, they present a firm nodular mass at the superior temporal corner of the orbital rim toward the skin side. Their malignant propensities have not been fully appreciated in the past. Experience and follow-up have shown in recent years that the recurrence rate is very high.[4] Whether they are encapsulated, they tend to invade their own capsules and erode into bone, a fact easily overlooked at operation. Roentgenograms are unreliable in detecting bony erosion. If bone is involved, wide resection of it must be accomplished.

Secondary neoplastic orbital invasion offers a host of possibilities. Because the ocular manifestations may be the only obvious clinical abnormality, thorough examination of the nasopharynx and nasal and paranasal cavities is imperative in all questionable cases of orbital tumor. Malignant nasopharyngeal tumors are of particular interest because the multiplicity of signs is often misinterpreted due to the absence of nasal symptoms. Any or all cranial nerves may be involved, although the abducens is the commonest in the beginning. Lymphosarcomas may appear in the orbit and lids, or beneath the conjunctiva. They generally tend to conform to local shapes. In contrast to mixed tumors of the lacrimal gland, they are smooth and usually present on the conjunctival surface. Surgical intervention is done only for diagnostic purposes. Twenty-five per cent of orbital metastases are bilateral, the breast and lungs accounting for the majority. The average life duration after detection is eight months. In infants, sympathicoblastoma, arising from the adrenal medulla or retroperitoneal ganglia and metastasizing widely via the blood stream, show an orbital affinity. As the resulting exophthalmos may be apparent long before the primary is detected, this possibility must be seriously considered in any young child. The tumor, tend-

ing to necrose, produces inflammation, exchymosis, and hematoma of the eye and adjacent structures.

This brief review is not intended to be complete, but the chances are good that any malignant tumor of the eye region you see will be one of these discussed.

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The Symptomatic Treatment of Allergic Dermatoses*

MAURICE KAUFMANN, M.D., and LLOYD D. MAYER, M.D.

Lexington, Ky.

THE difficulties which a general practitioner experiences with allergic dermatoses are the result of many factors. Perhaps the first is his lack of training in allergy or dermatology as a student and intern. Another factor is that the doctor seems to forget all of his basic medical knowledge when confronted by a patient with a dermatosis. Much of the above can be remedied by familiarizing oneself with the terminology, applicable basic sciences, diagnostic methods and therapeutic principles which apply to these specialties.

It is the purpose of this paper to help fill some of the gaps just mentioned. Much of the material presented is not new, but nevertheless, this review, including several references (1-7), should serve to remind us of many facts which too frequently are ignored or forgotten.

There is very little difference of opinion between the allergist and dermatologist regarding the topical therapy of dermatitis. If there is any conflict, it probably exists in the respective philosophy in the general approach and management of allergic dermatoses. As a matter of fact, some of the misconceptions pertaining to the specialties of allergy and dermatology are identical. Unfortunately, many of these erroneous notions exist among the laity, as well as among some of our professional colleagues. The statement that "your patients are never cured and never die," not only is inaccurate but actually untrue. The majority of patients with such conditions as infantile eczema, urticaria, drug eruptions, dermatitis venenata and allergic purpura, to mention a few, become free of their disease once the etiology is determined and the appropriate treatment instituted. On the other hand, death frequently results from such complicated and serious diseases as disseminated lupus erythematosus, dermatomyositis, scleroderma, and erythema multiforme exudativum. Comparably speaking, this situation is similar to the treatment of diabetes, heart disease or some other chronic ailment. The patient does not expect to be completely cured, nor does the physician promise cure. This, exactly, should be the attitude when encountering a patient with a severe or chronic allergic dermatitis.

When the patient with an allergic dermatosis consults a physician, he does so because he wishes immediate relief, and usually wants a quick cure. More often than not, by this time the patient already has been "treated" by well-meaning friends, neighbors and the local druggist. The medicaments applied may run the gamut from asafetida to zirconium. In circumstances such as this, it is understandable why the physician may wish to run, not walk, to his nearest office exit. Nonetheless, with some time and patience, even this predicament can be transformed from chaos to clarity, providing one possesses the knowledge to do it. If the general practitioner prefers to undertake the treatment of allergic or dermatologic disease, rather than refer to the specialist, he can confidently do so after he has been adequately schooled in the fundamentals of these specialties. Then, if proper symptomatic therapy fails to relieve the patient, help can be sought. As a matter of fact, if the patient fails to receive anticipated relief within what he considers to be a reasonable period of time, he will of his own accord quit the attending physician and seek help elsewhere. The patient with a dermatitis which has existed longer than expected, soon becomes worried and impatient. He fears the possibility of his disease being incurable, cancerous or contagious, and if not this, his discomfort and ego demand relief. Therefore, the general practitioner must have some familiarity with the commoner dermatoses. He should learn to orient his thinking and attitude when appraising a dermatologic allergy, and what even may be more important, he should be conversant enough to orient the patient as well. For example, with some enlightenment, the patient will realize that the application of just one "magic" ointment will not, in most cases, cause his chronic dermatitis to vanish overnight. In fact, it should be emphasized that the ointment may aggravate the affection if applied at the wrong time or if the patient has been previously sensitized to one of the ingredients.

*Presented at a meeting of the Kentucky Chapter, American Academy of General Practice during the KSMA Annual Meeting on September 18, 1957.

Dermatologic allergies include a number of ailments frequently encountered in general practice. The symptomatic treatment regarding many of these dermatoses will not be considered in this presentation because the dermatitis per se does not require much topical therapy since the disease frequently will be self limited once the etiologic agents are removed. Nevertheless, in order to help the nonallergist manage a dermatologic allergy, he should know which skin manifestations generally are considered to be cutaneous allergies. These are listed in Table I.

TABLE I

Classification of Allergic Dermatoses

1. **Eczematous dermatitis:—**
   Contact dermatitis (metals, plastics, pollens)
   Dermatitis venenata (ivy, oak and sumac)
   Atopic dermatitis, including neurodermatitis and certain prurigos
   Eczematoid eruptions of the hands
   Seborrheic dermatitis.
2. **Infectious dermatitis:—**
   Tuberculoderms and "ids"
   Dermatophytosis and dermatophytids
   Syphilis and syphilids
   Bacterial (Staphylococcus) and bacterids
3. **Drug eruptions:—**
   I. Arsphenamine dermatitis; fixed eruptions; urticarial, morbilliform and scarlatiniform eruptions; and exfoliative dermatitis
   II. Acneform, lichenoid, furunculoid, erythema - nodosum - like and erythema - multiforme-like eruptions
4. **Urticaria** and angioedema (including serum sickness)
5. **Purpuras** (drugs, infections, infestations)
6. **Erythemas** (due to drugs, foods, infections, physical agents)
   Erythema multiforme (including exudativum and bullosum)
   Erythema nodosum
   Photosensitivities
7. **Collagen group**
   Lupus erythematosus
   Dermatomyositis
   Scleroderma
8. **Questionable** (occasionally considered allergic on circumstantial evidence)
   Dermatitis herpetiformis
   Herpes simplex and zoster
   Psoriasis

Diagnostic Considerations

Before proceeding with the discussion on therapy, it may be advantageous to very briefly review and outline some of the methods necessary to diagnose and evaluate an allergic dermatosis. This implies ruling out cutaneous disease not due to hypersensitivity. Furthermore, it is wise to remember that causation more often is multiple than single. Obviously, if an accurate diagnosis is made and the etiologic factors determined, the therapeutic regimen can be much more specific, the chronicity shortened, and the cost of the illness lessened.

The procedures employed basically are similar to those used for diagnosing any medical problem, however, in dermatologic allergy, a special detailed history, type of examination, and indicated laboratory tests should be performed. The particular information gleaned from the history, examination and tests must be recognized and interpreted in order to ascertain the etiology and correct diagnosis. Table II outlines some of the more important processes which should be performed.

Treatment Objectives

When treating dermatologic disorders, regardless of the cause, there are several specific objectives which should be accomplished whenever possible. Anything short of this will usually leave the patient dissatisfied and unhappy. This is especially true when the dermatitis is present on the exposed surfaces of the body, or if the itching persists. Table III lists the main objectives in treatment.

Principles of Therapy

Perhaps this section of the discussion should be entitled the "Dos and Don'ts of Dermatitis Treatment" or "Rules and Regulations for the Therapy of Dermatitis." Irrespective of the title, if the suggested principles are observed, the practitioner at least will not aggravate or complicate the existing dermatitis. This in itself may prove to be an accomplishment because, as mentioned previously, the disease may be self limited, and if not made worse by incorrect therapy, the dermatitis gradually will disappear with the "tincture of time." Any inflammatory process, whether it be in the skin or elsewhere, needs time to resolve and heal. If the causal agents can be counteracted, and if the symptomatic treatment is beneficial, nature will do its share to help restore homeostasis.

A basic essential in the management of any dermatitis is to adapt the topical therapy to the current state of the inflammation. Depending upon the nature, quantity and chronicity of insult by the antigens, the reaction of the dermis may vary from erythema to lichenification. The phase of the inflammation may be

acute, subacute or chronic, and the pathology will be altered somewhat with each condition. Each aspect of the dermatitis requires appropriate topical and systemic therapy. All contributing factors must receive due consideration.

Special techniques should be utilized to control the situation. For example, the method of cleaning the skin is important. If an unsuitable cleansing agent is used or if improperly employed, this may account for continued irritation and eventual aggravation of the dermatitis. Scratching by the patient must be controlled in order to prevent repeated trauma and secondary infection. The latter possibility is a continual threat because of the existing bacterial flora on the skin, and because scratching frequently introduces additional bacteria. The infectious element of dermatitis must be combated by suitable antimicrobial agents. In brief, management consists in simultaneously neutralizing and treating all contributing elements. It frequently will take much time and effort to evaluate the situation and to educate the patient.

TABLE II

Diagnostic Considerations in Allergic Dermatoses

A. History:—

1. Previous dermatitis—when, age, diagnosis, treatment or recurrences.
2. Present attack—onset, when, where and how did it begin. Any unusual or different activities, exposures, contacts, infection, foods or drugs.
3. Course of dermatitis—extension, severity, remissions, exacerbations, secondary infection and aggravating factors.
4. Any concurrent systemic disease.
5. Other personal or familial allergies.
6. Environmental and occupational exposures.
7. Previous and present therapy. Results.

B. Examination of the skin, hair, nails, mucous membranes and lesions:—

1. Distribution of the lesions.
2. Morphology — macule, papule, vesicle, pustule, wheal.
3. Character—localized, discrete, symmetrical, lichenified.
4. Shape—linear, flat, raised.
5. Color — red, hemorrhagic, violaceous, waxy.
6. Configuration—circinate, discoid, nummular, ringed, serpiginous.
7. Consistency—edema, brawny, indurated, infiltrated, compressible.
8. Hairy areas—scaly, absent, deformed, parasites present.
9. Nails—brittle, discolored, thickened, absent, cracked.
10. Mucous membrances — lesions present, character, appearance.

C. Laboratory tests

1. Smears—bacteria, fungi, parasites.
2. Cultures—bacteria, fungi.
3. Biopsy.
4. Routine blood and urine analysis.
5. Special tests—L.E. cells, blood sugar, Kahn, platelets, porphyrins.
6. Allergy tests—
   Patch tests including suspected substances and oil fractions of pollens and plants (contact dermatitis).
   Endermal tests, including scratch, puncture and intradermal to protein allergens (atopic dermatitis).
   Mucous membrane and conjunctiva tests.
   Ingestion tests such as various trial diets.
   Environmental tests such as removing suspected allergens.

TABLE III

Objectives of Therapy

1. Relieve itching and discomfort.
2. Reduce inflammation, edema and vesiculation.
3. Prevent and treat infections.
4. Cosmetic preservation and restoration.
5. Reassurance when necessary.
6. Preventive measures such as protectant preparations and clothing.
7. Prophylaxis—
   (1.) Avoidance of allergens when known.
   (2.) Allergic management including specific hyposensitization.

At the initial consultation, one must adopt the precept that the proper medications prescribed, along with insistence upon strict adherence to the outlined program, plus the necessary modifications depending upon the progress of the case, will usually prove to be the least costly and most satisfactory in the long run. Table IV reviews the general principles in dermatitis treatment.

Systemic Therapy

The integument comprises a large and important area and organ of the body. However, when a physician undertakes the treatment of an allergic or dermatologic disease, he also should be cognizant of the individual to whom the skin belongs. The total person including his heredity, environment, social and economic status must be considered. Not regarding the patient as an entity often accounts for failure to control or cure the disease. The important feaures of systemic management are included under Table V.

TABLE IV

General Principles of Treatment

1. Complete avoidance of all suspected and causal agents and mechanisms.
2. The more acute the dermatitis the milder the topical medication; conversely, the more chronic the dermatitis the more stimulating the topical medication.
3. Whenever in doubt, always "undertreat" rather than "overtreat."
4. Acutely inflamed, weeping, vesiculating or crusted lesions require wet compresses or baths—wet on wet!
5. When the lesions and vesiculations begin to dry and the process becomes subacute, switch to lotions and creams.
6. Chronic, lichenified, thickened lesions require ointments.
7. Itching, scratching or fingering the lesions must be controlled by whatever methods are best.
8. Secondary infection must receive appropriate antimicrobial therapy.
9. Avoid sunlight exposure where tar ointments are applied.
10. Avoid vaccination or exposure to vaccinated area during active dermatitis.
11. Avoid greasy and tar containing preparations on hairy areas.
12. Avoid highly sensitizing ingredients such as "caines," antihistamines, mercurials and such antibiotics as penicillin and the sulfonamides in topical medications.
13. Always inquire about previous or presently known allergies or sensitivities to drugs or medications before prescribing potential sensitizing agents.

TABLE V

Systemic Therapy

1. Reassurance, including psychotherapy when necessary.
2. Sedation—barbiturates, chloral hydrate.
3. Antihistamines—those with sedative side effects best.
4. Tranquilizers.
5. Sympathomimetics—epinephrine, ephedrine, corticosteroids and corticotropins.
6. Vitamins—A (50—100,000 units daily), B complex (2—riboflavin, 5—pantothenic acid, 6—pyridoxine, and 12—cyanocobalamin), and sometimes D.
7. Antimicrobial agents when indicated.
8. Antiparisitic therapy when indicated.
9. Fungiostatic and fungicidal medications.
10. Allergic managements including avoidance, hyposensitization, diet.
11. Control or eradication of complicating factors such as diabetes mellitus, metabolic disorders, endocrine dysfunctions, foci of infection or infestation and any other systemic disease.

Topical Therapy

The skin, occupying so conspicuous a position and being so readily accessible for topical therapy, renders this detail of treatment inherent. An ideal topical preparation is one which will reduce inflammation, counteract pruritis, be nonsensitizing and promote healing. This is not an easy assignment and ordinarily cannot be accomplished by any one lotion, cream or ointment. The exact status of the dermatitis should be evaluated thoroughly before any attempt is made to treat it, then a relative specific plan of management should be formulated. This may require considerable expenditure of time by the practitioner and be quite tedious for the patient, who may object to what he thinks is an unnecessary inconvenience and expense. The patient must be instructed painstakingly in order to give him insight into the problem and to secure his cooperation. To skip lightly over these basic steps accounts for failure on the part of the patient to follow instructions and hence the prolongation of the disease. In fact, it is wise to give the patient written instructions so they will not be forgotten. There is no short cut to the successful management of allergic dermatoses, nor is there any medication which can be substituted for cerebration on the part of the physician. It is essential to employ the appropriate topical medications for the existing pathology. The rather brief, but ample number of more commonly used topical preparations listed in Table VI can be manipulated to provide a practical armamentarium for treating the majority of allergic dermatoses.

Diet

Foods may or may not play a prominent role in the allergic dermatoses, however, they must be considered accountable until proven otherwise. As a rule, when foods are implicated, usually not more than two or three prove to be clinically significant. Foods are more apt to produce symptoms in infants than in adults, however, regardless of age, the continual ingestion of just one food aggravator can make considerable difference in the outcome of treatment.

There are various methods to determine food sensitivity. Before skin tests to determine allergies became practical, trial diets were employed exclusively. This still is an excellent practice, providing one is in no hurry, and if the patient can be objective and cooperative

TABLE VI

Topical Medications and Agents

1. Baths (soothing, antipruritic, cleansing, absorption and soporific)—
Colloidal (starch, oatmeal and baking soda)
Menthol (cooling and antipruritic)
Tar (antipruritic and stimulating)
Potassium permanganate (bacteriostatic and fungicidal)
2. Cleansing agents—
Soap substitutes including detergents, mineral oil and colloidal "soaps"
3. Wet compresses (edema, vesiculation, erythema, pruritis)—
Aluminum subacetate (Burow's Solution)
$KMnO_4$ 1-10,000
$AgNO_3$ ¼%
4. Antimicrobial agents (low sensitizing index)—
Phenol 0.5—1%
Neomycin
Bacitracin
Vioform® 1—3%
Zephiran®
5. Fungistatic and fungicidal agents (clean, dry and light)—
Whitfield's ointment
Unsaturated fatty acids
Castellani's paint
Nystatin (Monilia)
Gentian violet
6. Lotions, liniments or creams (for subacute stage, ease of application and have emollient and astringent effect)—
Calamine
Steroids
7. Ointments (for chronic, thickened and lichenified lesions)—
Tars (coal or pine) 3 to 10% strength
Salicylic acid (keratolytic)
Steroids
Zinc oxide or petrolatum base

about his observations.

Skin tests to determine food sensitiveness can be performed readily, but even so, skin responses always should be confirmed by ingestion testing. The latter is done to corroborate positive skin tests and to prevent undue avoidance of foods which do not aggravate the dermatitis. The most practical system employed for this purpose is the "trial-elimination-provocative diet." This is accomplished by removing from the diet all of the reacting foods for a period of two to three weeks. This allows for subsidence in the activity of these food reagins. When each food suspect again is eaten in more than ordinary quantity for several days, in order to evoke an antigen-antibody reaction, those foods to which the patient is clinically sensitive will reproduce symptoms, the remainder will not.

Another form of diet trial is to remove seven or eight of the so-called "common" food offenders. Then as the dermatitis wanes, each of these foods is reintroduced into the diet. Some practitioners prefer removing only one or two of the more common allergenic foods and observing whether the dermatitis improves. This type of elimination diet, as well as the one removing only seven or eight "common" food offenders, has a major disadvantage in that frequently an unsuspected food which may be a specific allergen, is not eliminated. This could prove to be a serious error because failure to reveal a particular food as an offender may result in discarding the idea that foods play any role in the causation of the disease. Consequently, the dermatitis either will persist or recur periodically, until all specific food offenders are eliminated.

Keeping a food diary may help to disclose a cryptic food offender. By recording all foods ingested, the hours eaten and the relation to the onset of symptoms, one can ascertain common denominators, that is, every time a particular food is eaten, it is followed by a distinct aggravation of the dermatitis.

Before a food can be incriminated as a definite allergen, it should satisfy certain criteria. One, the dermatitis should be aggravated whenever the food is consumed in sufficient quantity; and two, symptoms should abate upon discontinuing the ingestion of this particular food. Another lesser known but important fact is that specific food offenders can provoke a reaction within a few minutes to a few hours after ingestion, and it may take several weeks for the ill effects from a specific food allergen to subside or disappear.

Allergic Management

Allergic management consists of two distinct phases. The first is the determination of all causative, contributing and aggravating factors. The second consists of avoiding these factors, immunization against unavoidable allergens, and selective symptomatic treatment.

Oftentimes, this is easier said than done. Nevertheless, much of this program, with the exception of immunization procedures, can be accomplished by utilizing the information in this paper. Many dermatoses, particularly contact eczematous eruptions, require no treatment other than the removal of the etiologic

agents and the alleviation of the inflammation and pruritis. However, there are many allergic dermatoses which will persist or recur periodically until specific hyposensitization against the activating allergens produces immunity. This type of treatment is definitely indicated in atopic individuals and frequently is helpful in ivy sensitiveness and "id" allergies.

Whenever complete examination fails to elicit the etiology of allergic dermatoses, allergy testing is indicated. If the positive reacting allergens can be entirely avoided, hyposensitization is unnecessary. However, if the atopens are of the type to which immunity can be artificially produced, then specific hyposensitization is indicated to arrest the existing dermatitis and prevent the development of subsequent episodes. This type of treatment also may avert widening of the allergic base and progression into other allergic manifestations.

Summary

The general practitioner is repeatedly confronted with allergic dermatoses in his practice. He, therefore, should prepare himself to cope intelligently with these diseases. He should learn to recognize the common cutaneous allergies and should become familiar with the fundamental principles of therapy. Whenever feasible, he should endeavor to obtain all the facts of the case by proceeding as outlined, thus arriving at a rational program of treatment. All of this may take considerable time and effort, but the results will be rewarding.

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Hypertension—General Considerations

Carl H. Fortune, M.D.
Lexington Ky.

A great deal of study has been devoted to hypertension and an extensive literature has accumulated on the subject, although clear cut and generally accepted conclusions have not been reached. It is my purpose to state the problem and present a classification of hypertension.

Definition

A definition of hypertension seems to be a logical starting point, and this is not simple. Many have considered life insurance tables, requirements for admission to military service, and the old rule of 100 plus the age to be acceptable criteria of hypertension. However, all who have had the opportunity of following patients over a period of years can recall individuals who, when first seen, had a blood pressure which by these criteria would have been considered elevated. Yet some of these persons have lived to advanced years without developing renal impairment, cardiac enlargement, or evidence of arterial sclerosis out of proportion to their age. The question arises whether such individuals should be considered hypertensive.

Master[1, 2] and his associates, with the cooperation of many practicing physicians, have recently analyzed 5,757 healthy individuals between 65 and 106 years of age. They find that in 80 per cent of these individuals the range of systolic pressure is between 115 and 175 for males and between 120 and 192 for females. The diastolic pressures are 70 to 95 for males and 65 to 102 for females. They conclude that a blood pressure should not be considered pathologic in the absence of evidence of cardiovascular disease if it falls within the middle 95 per cent of the group, which gives a range of 100 to 190 systolic and 62 to 102 diastolic for men, and 100 to 212 systolic with 55 to 112 diastolic for women. The average for the entire group was 145/82 among men and 156/84 among women. The mean diastolic does not tend to rise in this group after 65. Other studies by Alvarez[3] showed that a considerable number of apparently healthy college students have blood pressures above 140 systolic. In 1950 Master, Dublin, and Marks[4] published reports on 74,000 industrial workers which indicated that systolic and diastolic pressures well above accepted levels are not definitely pathologic.

Classifying the Individual

The observations cited do not establish definite criteria for classifying a given individual. In large groups, such as life insurance applicants, experience has shown that persons with blood pressures above certain levels, which are generally set around 140 systolic and 90 diastolic regardless of age, are more apt to develop renal or cardiovascular complications. In a given individual who presents himself as a patient—perhaps solely because he has been refused life insurance at standard rates—blood pressures considerably above these levels may not be abnormal and may not indicate a predisposition to renal or cardiovascular complications. The physician is faced with the problem of deciding whether this individual requires treatment, or whether his activity should be limited, and whether he should have the psychological trauma of being branded as hypertensive. It is a quesion which can be answered only after careful investigation of the renal and cardiovascular status by every available means; it may require further evaluation after observing the patient on repeated visits, sometimes over a period of months or years. I have frequently told patients, whom I had considered hypertensive and treated as such, that I had revised my opinion and that they could forget their hypertension except for avoiding obesity and having an annual physical examination. The blood pressure which remains constant over a period of months or years, even though definitely above the accepted level, gives me much less concern than one which initially is considerably lower but which is a little higher each time than on the previous observation. For this reason, the few extra minutes required to take the blood pressure and record it, regardless of the illness which brings the patient in, often will provide invaluable information for the future. It is information which years hence will be absolutely unobtainable if this simple procedure is not followed.

Approach to Treatment

Having determined that the patient has hypertension, the proper approach to treatment

requires a classification, both as to cause and severity. A simple classification of types is given in Table I. It is now generally accepted that

Table I. Classification of Hypertension

Primary hypertension
- Malignant hypertension
- Essential hypertension

Secondary hypertension
- Chronic glomerular nephritis
- Acute glomerular nephritis
- Chronic pyelonephritis
- Unilateral kidney disease
- Polycystic Disease of Kidneys
- Toxemias of pregnancy
- Pheochromocytoma
- Pituitary disease
- Cushing's Disease
- Diabetic glomerulosclerosis (Kimmelstiel-Wilson disease)
- Periarteritis nodosa
- Amyloidosis
- Coarctation of aorta

hypertension can be a primary disease. Argument continues as to what is the responsible factor. The monumental work of Goldblatt in 1934 led to the premise that hypertension is due to renal ischemia and that the kidney liberates a substance known as renin which acts on a substrate in the blood to give hypertensin or angiotonin. This is held in balance by an antipressor. This concept is not universally accepted by recognized workers because some experimental work is difficult to reconcile with such a concept, but the pressor-antipressor theory has the most general acceptance. The so-called malignant hypertension is associated with marked arterial changes in the kidney glomeruli, giving the picture of necrotizing glomerulitis. Some controversy exists as to whether essential hypertension is an entity, or whether it simply represents those patients who should never have been classified as hypertensive, together with patients having mild forms of the malignant hypertension. Various classifications of severity may be used, all depending on degree of cardiac, vascular or renal damage. They are important in planning therapy and properly should be considered in that connection.

The treatment of secondary types of hypertension depends on the degree of treatability of the primary disease. In some instances, such as chronic nephritis, the outlook is discouraging. In other instances, such as unilateral kidney disease and pheochromocytoma, results may be brilliant. In some, such as acute nephritis and eclampsia, careful management of the acute emergency may result in complete cure. In these cases the procedure is more clear cut and the problem is less baffling.

Summary

In summary, an orderly approach to the problem of hypertension should include:

1) A determination of whether or not a pathological hypertension is present.

2) Classification of hypertension, if present, as primary or secondary; and if secondary, determination of cause. In many instances the secondary type of hypertension will be suspected only if its possibility is borne in mind and considered in every case. Treatment can then be intelligently planned on the basis of this information.

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Surgical Treatment Of Essential Hypertension

Peter Hywelris Jones, M.R.C.S., L.R.C.P.
Lexington, Kentucky

ESSENTIAL hypertension with its crippling potentialities is most common. Variations on a theme of conflicting evidence, alternating hopes and frustrations from successive remedies raise an atmosphere of despair. Despite this, a working hypothesis concerning the pathogenesis of hypertension has been expressed by Friedland:

"The pathogenesis of essential hypertension involves a variety of mechanisms consisting of neurogenic, renal and endocrine components. It is not yet possible to measure accurately the specific contribution of each of these components. On the basis of the available data, it may be postulated that neurogenic influences activate a pressor response by way of the autonomic nervous system, and the pituitary-adrenal axis. They also cause characteristic changes in renal haemodynamics. If the pressor response is sufficiently prolonged, the renal vasculature becomes damaged and triggers the liberation of an agent or agents that perpetuate hypertension."

Elastic Function of Arteries

The elastic function of arteries resides in the aorta and larger branches and diminution in this elasticity raises the systolic but lowers the diastolic pressure. Capillary pressure is low. Peripheral resistance is due largely to the highly developed muscular system of arterioles, and it is now more or less accepted that hypertension is produced by functional vasoconstriction of the arteriolar system. To do this, vasoconstriction must be widely spread and involve the splanchnic area. The available evidence indicates that vasoconstriction producing hypertension is evenly distributed through the abdomen, skin and limbs.

The development of this knowledge enabled surgeons to lessen the vasoconstriction and peripheral resistance by removing the responsible nerve supply. To ensure success a wide area must thus be denervated. So the modern operation seeks to remove thoracic and lumbar ganglia of both sides. It is fundamental that nerve removal shall be preganglionic to avoid sensitization of myoneural junctions to circulating adrenaline. It has been accepted generally that:

1. The young hypertensive patient will do well after surgery.

2. The old arteriosclerotic patient, with hardened arteries, a wide pulse pressure and fixed hypertension, is not suitable.

Selection of Patients

Adequate clinical information is essential in selection of patients for surgical treatment of hypertension. First, patients must be screened to exclude such cases as aortic coarctation, pheochromocytoma, glomerulonephritis, and Cushing's syndrome. Clinical evaluation of the degree of vascular damage present in cerebral, renal, retinal and cardiac areas is mandatory. Such is confirmed or refuted by observation, laboratory tests and fundoscopy.

Often one vascular area has suffered more than others and operation may be indicated when a sound medical regimen has failed to halt the progression of damage in that area. From these observations patients can be grouped indicating severity of the disease and for this we employ Smithwick's classification:

Type 1. Pulse pressure less than half the resting diastolic pressure.

Type 2. Pulse pressure more than half the resting diastolic pressure, but less than half the diastolic pressure plus 19.

Type 3. Pulse pressure more than half the diastolic pressure plus 20.

The importance of this typing is that it gives a good indication of the cross section of the arterial bed.

Type 1 has the best prognosis. The narrower the pulse pressure, the better the prognosis. A wide pulse pressure suggests fibrosis and less lability in the vascular tree. Therefore in the selection of candidates for surgical sympathectomy the following indications are enjoined:

1. Average diastolic pressure of 120 or more.

2. Failure to respond to intensive medical therapies.

3. Evidence of progressive damage to heart, kidneys, brain or eyes.

Contraindications are:

1. Impaired renal function.

2. Recovery from a stroke or coronary occlusion for less than six months.

3. Age beyond 55 years.

4. Inability to cooperate following surgery because of intellectual deficit or emotional lability.

It should be realized that patients are not operated upon until full recovery from borderline cardiac, renal or cerebro-vascular failure has occurred. Moderate reductions in blood pressure improve the circulation and tend to reverse most abnormalities seen previously in those with hypertension. Noteworthy improvement occurs in electrocardiograms, eyegrounds, and kidney function. Symptomatic well-being is attained in groups who obtain a fall as well as those who do not.

Procedures Employed

The operative procedures employed are Smithwick's thoracolumbar sympathectomy and the same procedure combined with subtotal adrenalectomy.

In the simpler procedure an incision is made over the 12th rib from the mid-axillary line downward and medially almost as far as the umbilicus. The 12th rib is resected and the diaphragm exposed. Severance of this latter structure enables one to enter the extrapleural as well as extraperitoneal cavities for easy access to thoracic and lumbar sympathetic chains. They are removed from the 7th thoracic ganglion down to and including the 3rd lumbar ganglion as well as the splanchnic nerves. Should cardiac pain indicate, the chain can be removed from the first thoracic ganglion, but a separate access to the chest cavity is required.

More recently subtotal adrenalectomy has been done. It is believed that there is a potent stimulus maintaining blood pressure in the hypertensive patient emanating from the adrenal cortex, medulla and sympathetic system. There is a notable absence of return of blood pressure postoperatively as seen in some patients. Nevertheless, subtotal adrenalectomy should only be done in the more youthful hypertensive patient who has no evidence of renal change, as the dangers of potassium retention and water imbalance may be high.

Total adrenalectomy or removal of too much tissue necessitates steroid therapy. These operations produce the following:

1. Vasodilatation of arteries and veins in areas denervated, with compensatory vasoconstriction elsewhere.
2. Absence of sweating in denervated areas.
3. Failure of ejaculation in the male.
4. Presumed denervation of the adrenals.
5. Increased colonic motility.
6. Impaired perception of pain arising in abdominal viscera.

Results

Following surgery, postural hypotension may occur and last for several weeks. However, even though the physiologic changes are profound, readjustments occur in a matter of months with a disappearance of unpleasant symptoms. Response to drugs is more pronounced and sensitive, even with smaller doses.

Postoperative complications are rare. Sepsis is prevented with adequate chemotherapy and gentleness in handling the tissues. Intercostal neuralgia rarely occurs with this type of incision. Lung complications are almost nonexistent—a tribute to modern anesthesia and anesthesiologists.

In nearly all follow-ups of patients reported in the literature there is not one who has not benefited in some way by fall in pressure, relief of symptoms, or improvement in functions of damaged organs. It is remarkable that even grade IV retinopathies revert to a grade I or even normal fundoscopic appearance.

It must be stressed that the criterion for success is the permanent lowering of diastolic pressure and increased capacity for work and exercise. Some of the most dramatic results, however, have been seen in cases in which the fall is negligible, but nevertheless, the patients have been able to return to their former vocations, becoming contented people with a new lease of life.

**Presented at the annual Fall Clinical Conference of the Lexington Clinic, October 25-26, 1957.*

Wisdom is the principal thing; therefore get wisdom; and with all thy getting, get understanding.
—Proverbs IV, 7

Varicose Veins

LANIER LUKINS, M.D., F.A.C.S.
Louisville, Ky.

VARICOSITY of the veins is a common disease affecting principally the superficial veins of the legs. Varicose veins have been defined by Dr. Matas as those having a permanent dilatation due to changes in their walls. In addition to the changes in the walls, varicose veins have incompetent valves. The saphenous veins and their branches are the ones most often involved.

The erect posture of man places an unusual strain on the saphenous network. Individuals who must stand for long hours are especially affected. There is also an hereditary tendency. Varices tend to develop in early adult life, the active working and child-bearing period. The process often extends up to the groin but the abundant subcutaneous fat in the thigh usually conceals the enlarged veins, especially in women.

As stated above, varix affects primarily the superficial, not the deep veins. The latter are normally larger and stronger and are surrounded by muscles which have both a supporting and a milking action. The superficial vessels, unsupported between the skin and the fascia, are exposed to the effects of back pressure and stasis which lengthen and dilate them and render their valves incompetent.

The early symptoms of venous insufficiency are a tired, heavy sensation in the legs, cramps in the calves or feet and swelling of the feet and/or ankles. The next changes to be noted as the condition progresses are pigmentation or browning of the skin at the ankle and the formation of "spider-webs" or "sunbursts" due to groups of multiple small veins and venules becoming permanently dilated. At a certain stage in the condition the pressures and traction on the nerves accompanying the veins may give painful radiations. The extent of the varicosities does not parallel the degree of pain, however. In fact most of the symptoms are usually due to complications such as ulcer, phlebitis, eczema, or infection in the surrounding tissues. Varicose ulcer is by far the most common of these complications. It usually begins as an abrasion which easily becomes infected and is very slow to heal. It is apt to "ride" directly on a varicose vein.

The most common location of varicose ulcers is in the lower one third of the leg on the medial aspect, that is, near the lower end of the greater saphenous vein. They have no characteristic size, shape or appearance but are not "punched out" like syphilitic ulcers and are usually surrounded by an area of cellulitis.

The treatment of varicose ulcer is based upon principles which are well established but apparently not generally recognized nor widely practiced. First, in most instances, removal of the varices cures the ulcer secondary to them. Second, it actually matters very little what type of salve or solution is used locally. Third, pressure is very helpful in the prevention of local stagnation and may be obtained by means of support of some type. Fourth, large and indurated ulcers are not necessarily cured by the eradication of the varix, because either the scar may be so dense and deep that the arterial blood supply to the area is cut off or an incompetent communicating vein may be present. Both of these unfavorable influences are eliminated by excising the ulcer with a wide margin down to and including the deep fascia covering the muscles. This fascia is never penetrated by the inflammatory process. A skin graft may afterwards be applied to the clean surface exposed by the excision.

The degree of incompetency of the valves in varicose veins may be demonstrated by means of the Trendelenburg tests. These tests are accurate and interesting but not really necessary for one who has seen very many of these cases. The Perthes test or some variation thereof, is however, most important before doing anything to destroy any great part of the superficial venous network. The best method of performing this test is to apply an elastic bandage to the leg and have the patient walk vigorously for at least fifteen minutes. If no discomfort, such as cramping in the calf muscles, is produced, the deep veins are patent. If the patient is already wearing an elastic bandage or stocking with no discomfort, the test has already been performed for you. If the test is positive, it means that the return circulation of the leg has been stopped by obstruction of the deep or femoral veins and any method of excision, ligation, or extensive injection of the superficial veins for the correction of varicosities is contraindicated. This condition is rather rare.

Palliative treatment, erroneously termed

conservative, by bandaging or by the wearing of an elastic stocking is indicated for those with varicose veins, who because of age, poor general condition or prejudice, are unsuitable for surgical treatment.

Surgical treatment is, in my opinion, best carried out by ligation or injection, or a combination of the two. High-low ligation along with stripping of the Greater Saphenous Vein is the only operation needed in the great majority of these cases. In a small percentage it is necessary also to interrupt the communicating veins through a separate segmental incision or even to excise a sacculation.

My routine consists of high-low ligation along with stripping from the ankle to the groin. This gives a much more permanent closure than injections alone and also minimizes the danger of emboli from injections. Almost every patient is placed upon his feet within a few hours at the most, after operation. Elastic stockings and bandages are used as an adjunct to the treatment but can soon be permanently discarded in practically all instances. Sylnasol® is used by me and by most others as the sclerosing solution of choice at the present.

Every patient who comes to me for treatment of varicose veins is "worked-up" with a complete history (including specialized questions about varices) and physical examination which includes the Perthes test. Urinalysis and a Kahn or similar test are done in all cases.

About three-fourths of the patients with varicose veins seen at my office, have demonstrably incompetent valves in the saphenous veins. They therefore need operation and are so advised. About two-thirds of the total varicose vein cases that I see actually undergo surgery. Most of those so operated upon require a few low follow-up injections in order to effect a complete closure. High ligation of the saphenous vein is the most essential part of the treatment of this group of cases and is far more efficacious than injections alone. It gives much more permanent relief, lessens the number of necessary injections, and serves as an efficient barrier against embolism. In this group of patients, it is shown particularly well, that high-low ligation along with stripping and any necessary injections, is a most satisfactory procedure from the standpoint of safety and the reliability of end results. Very few, if any, injections are needed after complete stripping combined with segmental division of incompetent communicating veins, the so called "blow-out" areas.

The patients who do not have incompetent venous valves are treated with injections alone for the most part. These consist of early cases, young individuals, those with mild involvement, localized areas and good general conditions. This group gets relief of symptoms and prophylaxis against ulcer formation which is good temporarily and may be permanent.

The group in which ligation is advised, but not carried out (8%), have injections, support, elevation when sitting or lying and other palliative measures but usually get only fair relief which is even then only temporary. Homans explains it as follows: "Unfortunately, the veins of the thigh are so seldom accessible to the needle that an effective injection is rarely made above the knee. Thus, new varicose connections are soon formed and, in addition, the sclerosed trunks are readily canalized."

In all groups, wearing of garters is advised against. The securing of good elimination and the forcing of fluids is constantly urged and the patient's occupation changed to one conductive to less mechanical strain if possible. The patients are seen at increasing intervals for some time so that any recanalizations or new varicosities can be injected when still early and small.

The detailed operative technique for excision of the superficial veins and the treatment of complications such as rupture, thrombophlebitis or varicose eczema need not be described here as these subjects are well presented in standard tests.

The operation advocated above adds nothing to the work of the deep veins. In fact, since blood actually flows down varicose veins, the deep veins must continually carry off the excess brought to them from the superficial vessels. By doing away with this back-flow by saphenous resection and obliteration of the superficial varices, the deep system is actually relieved of some of its load. Then, too, since this operation permanently breaks the column of blood which stretches from the heart to the foot, the interruption of the superficial veins of the thigh at their upper end is more important than the mere destruction of the venous channels of the leg.

In conclusion, I wish to emphasize that although the disease, varicose veins, is chronic and its complications of a recurrent nature, it is amenable to the treatment stated and its progress can be satisfactorily arrested.


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Mesenteric Vascular Thrombosis*

R. W. Robertson, M.D., F.A.C.S. and W. B. Haley, M.D., F.A.C.S.
Paducah, Ky.

MESENTERIC vascular thrombosis is an acute abdominal emergency. If the patient is not operated on, it is practically one hundred per cent fatal. Only by early diagnosis, surgical intervention and modern methods of treatment, has the high mortality rate of the past been lowered.

Whittaker and Pemberton gave a detailed report of sixty patients seen at the Mayo Clinic prior to 1938. Only nineteen (31.6%) underwent surgery and sixteen of this group died, an operative mortality rate of 84.2 per cent. The remaining forty-one cases were not operated on and all died. In a later series of twenty-four cases of proved masenteric vascular thrombosis reported at the Mayo Clinic during the years 1939 to 1950, thirteen underwent surgery. This operative rate of 54.1 per cent was an increase of 22.5 per cent. Of the thirteen patients operated on, ten survived, giving a surgical mortality rate of twenty-three per cent. The remaining eleven cases were not operated on, due to their extremely poor condition and lack of response to intensive supportive therapy. The mortality rate in this group was one hundred per cent.

Our series of seven proved cases of mesenteric vascular thrombosis seen in six years is not large, but we feel it is an unusual number for a private practice.

Etiology

The cause of this condition is often not detected. In five of our cases, we were unable to determine what initiated the circulatory obstruction. There was no evidence of cardiovascular or any associated disease. In the youngest, a male, thirty years of age, and apparently the most healthy of the series, a massive resection of his small intestine was necessary. The oldest two had cardiovascular impairment and the cause was attributed to this disease. The seventh case was a patient who had continuously had trouble with a post-thrombophlebitis syndrome and bilateral varicose veins for a number of years.

Diseases associated with mesenteric vascular thrombosis are cardiovascular disease, pathological splenic conditions, polycythemia vera, blood dyscrasias, cirrhosis of the liver, intra-abdominal infections, and malignancies. Cases thought to be of traumatic origin have been reported following long surgical procedures.

Males are affected more often than females and this series ran true to form in this respect, as four out of the seven were males. From the literature reviewed, it seems the middle age group is more often affected but cases are reported from childhood to old age. Our youngest patient was thirty years of age and the oldest was seventy-eight.

Pathology

Whether this condition is primarily a venous, or arterial thrombosis, or embolus, is difficult to determine, both clinically and pathologically. Cases with symptoms coming on insidiously for several days before surgery suggest a venous thrombosis. Cases with a sudden severe onset and the bowel being gangrenous at operation in a few hours are more suggestive of arterial emboli or thrombus.

One of our cases was inoperable when it was found that the whole small intestine and the colon to the splenic flexure was without a blood supply. Such an extensive blockage of circulation was thought to be arterial and was attributed to an embolus or thrombus of the main stem of the superior mesenteric artery. The onset had been sudden in a cardiovascular case with auricular fibrillation.

Diagnosis

Most of the patients go to surgery undiagnosed and in only two of our cases did we suspect gangrenous bowel was present. This diagnostic point was obtained after enemata returned with old blood present. We feel this is a very suggestive diagnostic point and if blood is present, immediate surgery should be contemplated. Vomiting is usually present from the beginning. In some cases there is absolute constipation of both feces and gas.

Pain is a constant finding, but is variable and may be characteristic of other acute and subacute abdominal pathology. The onset may be sudden with severe exacerbations of cramping, and on the other hand, the pain may come on

*Presented at a meeting of the Kentucky Chapter, American College of Surgeons during the KSMA Annual Meeting, September 18, 1957.

slowly and be constant and aching in character. The severe pain in the upper and midabdomen can be highly suggestive of coronary occlusion, acute pancreatitis, perforated peptic ulcer, and other acute abdominal emergencies. Coronary occlusion can be ruled out by an electrocardiogram, a serum amylase test will differentiate acute pancreatitis. The scaphoid abdomen and marked rigidity found early in a perforated ulcer is not seen. Peristalsis may or may not be present. When the bowel becomes gangrenous and there are signs of peritonitis, the abdomen becomes silent and distention will be seen. At this stage, there is marked tenderness to pressure, rebound tenderness and rigidity being more prominent over the involved segment of bowel.

Roentgenologic studies should be made of the abdomen, with the patient in the upright position or lateral decubitis, to rule out free air under the diaphragm. A flat plate of the abdomen is of diagnostic value also in other ways. Rendich and Harrington are quoted as follows, "The possible diagnosis of thrombosis of the superior mesenteric vessels should be among those considered, when the plain roentgenogram of the abdomen discloses large bowel dilated down to the region of the splenic flexure simulating a mechanical obstruction. If a barium enema reveals no obstruction, it is believed that the diagnosis may be ventured with some probability." Our flat plates failed to reveal a dilated colon with the exception of one case. Routine blood counts and urinalysis are made. Leukocytosis will be found with a high poly count. Following a thorough study, if all signs and symptoms still indicate a surgical abdomen, the patient is given supportive therapy and scheduled for immediate surgery.

Surgical Procedure

An incision is made at the point of most marked tenderness. This point was on the right side in all seven of our cases and a right rectus incision was made. The gangrenous bowel and involved mesentery are examined and the resection decided on. Because of the marked thickening and dilation of the adjoining viable bowel, we feel it best to sacrifice another four or six inches for a better anostomosis and surer blood supply. An end to end anastomosis is done and the abdomen is closed.

Prognosis

This depends on the amount of bowel involved, age of patient, associated conditions, time lag between onset and surgery, and pre- and postoperative care. As recently as 1942,



Figure 1. Specimen from massive resection Case No. 1 L. P. Picture made 24 hours after formalin fixation. This represents all but three feet of small intestine.

Summary of Cases

Patient	Age	Sex	Etiology	Operated	Time Lapse	Bowel Resected	Lived
L. P.	30	M	Unknown	3/27/51	34 hrs.	10 feet (estimate)	
L. W.	56	M	Unknown	10/14/51	13 hrs.	24 inches	Yes
I. T.	62	F	Unknown	12/3/53	14 hrs.	16 inches	Yes
M. N.	43	F	Unknown	4/5/54	14 hrs.	30 inches	Yes
H. K.	73	M	Cardiovascular Disease	11/21/55	36 hrs.	23 inches	Yes
H. M.	78	M	Cardiovascular Disease	3/26/56	20 hrs.	Closed without resection	No
R. M.	61	F	Past history of Thrombophlebitis, Varicose Veins and Thrombophlebitic Syndrome	8/14/56	52 hrs.	25 inches	Yes



Figure 2. Case No. 1: L. P.: G. I. series made three weeks following surgery. Note the compensatory dilatation of remaining three feet of small intestine for increased absorptive power.

this statement was printed, "This disease is almost universely fatal, reports of recovery should be regarded with suspicion." With modern methods of serum studies, showing normal or abnormal electrolyte and protein balance, and with blood being used more freely, a patient with this disease has much better prognosis now than he had twenty years ago. Six of my seven cases are alive. All are in good health with the exception of the patient who had the massive resection. He had attacks of diarrhea requiring hospitalization several times during his first two years after operation. Recently, I have not heard from him, and assume he is in better health. The seventy-eight-year old man who died was admitted with auricular fibrillation, blood pressure of 230/110, and a history of being under the care of a physician for cardiovascular disease. Fifteen hours previously, he had had severe, sudden epigastric pain which was not relieved by two quarter grain injections of morphine. His serum amylase was in normal range and his electrocardiogram was negative for coronary occlusion. As he was progressively getting worse, and showing evidence of shock, he was given digitalis and scheduled for surgery. An exploratory operation revealed that his entire small intestine and his colon to the splenic flexure was dark bluish in color. There was no mesenteric pulsation, or any pulsation of the midcolic artery. Surgery was out of the question, and antiocoagulants, antispasmodics and supportive therapy were his only chance. He died of shock twelve hours later.

Post-Operative Care

Supportive therapy is just as important postoperatively, as it is preoperatively and during surgery. As soon as the patient is awake, a Levin tube is inserted and connected to a suction apparatus. This tube is not removed until peristalsis is heard and the patient is passing gas. Hematocrits and serum protein and electrolyte balance studies are carried out and blood and fluids given accordingly. If cardio-



Figure 3. Case No. 1: L. P. Note barium reaching cecum 2½ hours after ingestion, which is about normal time when all intestine is present. The white line outlines the small gut into cecum. The barium in these pictures shows up black. The white areas are gas present.

vascular disease, or any of the associated conditions above listed are present, an internist, or cardiologist, should be consulted. We feel that fifty milligrams of heparin should be given immediately postoperatively every four hours and continued until dicumaral can be given orally, and has taken effect as judged by the prothrombrin daily readings. Although we used anticoagulants on only three cases, it is our opinion now that anticoagulants should be given in all cases and continued for two weeks. Antibiotics and antispasmodics are essential and should be given.

The postoperative care in the case of massive resection required constant and diligent attention. The bloody engorgement of the removed segment of gut of this magnitude is comparable to a patient having a severe internal hemorrhage. A thousand cc. of blood was given to this patient during surgery, a thousand cc. immediately postoperatively, and 1500 cc. more was given during the long convalescence. These cases are complicated by a severe diarrhea resulting in anemia, vitamin deficiency, weakness and loss of weight. Some are further complicated by tetany. Being without most of the organ from which a large portion of our food is absorbed, is, of course, the cause of this debilitation. The jejunum absorbs more fluids and sugars, while the ilium absorbs the major portion of the proteins and fats. The explanation for the low blood calcium resulting in tetany is that forty per cent of the fats pass into the colon unabsorbed. The free fatty acid in the stool then carries the calcium away in the form of calcium soap. This case did not show any signs of tetany.

The diet should be high in carbohydrates and calcium, and low in proteins and fats. Vitamins are essential, especially vitamin D. The diarrhea is combated with drugs such as Resion® or Pectocel® and paregoric. Daily intravenous fluids containing vitamins are usually necessary for the first two weeks.

Gradually the remaining gut compensates by dilating to about twice its normal size, thereby greatly increasing its absorptive power. After a number of weeks, the gut again becomes able to utilize proteins and fats to a higher degree.

The term massive resection of the small intestine can not be strictly defined. Moynihan states the length of the intestine varies so greatly that a standard measurement cannot be given. Studies have shown variations from ten feet to twenty-eight feet and four inches. There is a very marked variation according to the state of freshness or fixation in formalin. Morris' textbook of anatomy gives the average length of the small bowel, including the duodenum, as seven meters when freshly removed and four meters when fixed. The 10 feet estimate of the case we have described was obtained after the specimen had been fixed twenty-four hours in formalin.

Summary

Seven cases of mesenteric vascular thrombosis have been presented from the years 1951 to 1956. All seven were operated on and six survived surgery. The one fatality was a seventy-eight-year-old, cardiovascular patient, in whom resection was impossible. I have recently contacted five of the six survivors. They are all in good health and leading normal lives. The massive resection case is still alive as far as I know. I believe the decrease in mortality rate in the last twenty years is due to the strict regulation of electrolyte balance, freer use of blood and better postoperative care.

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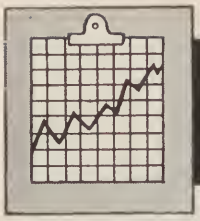
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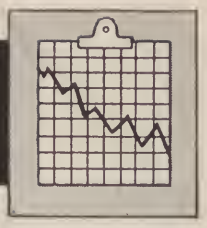
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CASE DISCUSSIONS
From The
University of Louisville Hospitals



A Case of Tetanus*

The Children's Hospital

History

R. C., an eight-year-old white male, was admitted to the Pediatric Service of Children's Hospital on August 3, 1957 with the chief complaints of stiffness of the body and difficulty in opening his mouth.

Ten days prior to admission the child had lacerated his right great toe on a garden hoe. The wound had been washed with water and then sutured. Penicillin and tetanus toxoid were administered. During the next eight days the child appeared well. On August 1, 1957, two days prior to admission, he complained of a sore throat and difficulty in swallowing. The next day he had pain in his throat which was aggravated by swallowing. Cramping paraumbilical pain was also present. On the day of admission "drawing" of all four extremities was noted.

The previous medical history is of significance in that the patient had had no prior tetanus immunization.

Physical Examination

At the time of admission the child was apprehensive, but oriented and cooperative. He appeared developmentally within normal range for his stated age. A tachycardia and tachypnea were noted. The respiration and blood pressure were normal. A twelve millimeter crusted, indurated lesion was present on the right great toe. Severe nuchal-spinal rigidity was present. The legs were held in extension while the feet were in plantar flexion. The jaws could be separated only with manual assistance. The abdominal muscles were tense. The superficial and deep tendon reflexes were intact and equal, but the knee jerks exaggerated the extensor spasms. No sensory loss or motor weakness was found. During the examination periodic bouts of extreme extensor rigidity occurred involving mainly the lower extremities, back, and neck. The remainder of the examination was within normal limits.

Shortly after admission the child was taken to the operating room, and the following procedures were accomplished under general anesthesia:

1. A tracheostomy was performed
2. Debridement of the wound
3. Infiltration of tetanus antitoxin in the wound area
4. Parenteral administration of 80,000 units of tetanus antitoxin
5. Insertion of a nasogastric feeding tube
6. Digital examination of the rectum
7. Parenteral administration of aqueous crystaline penicillin

It is of interest to note that clostridium tetani was subsequently cultured from the debrided material.

During the next twenty days the caloric and fluid needs and indicated oral medications were given through the nasogastric feeding tube. A total of 2.4 million units of oral penicillin V were given daily. Heavy sedation was maintained with chloral hydrate and supplementary doses of phenobarbital. Special duty nursing was provided around the clock to permit constant observation of the patient for any deviation of his vital signs or other evidence of complications as well as for care of his tracheostomy.

Hypothermia was introduced on the third day in order to lower the metabolic rate and reduce the oxygen requirement. However, intermittent generalized tonic extensor contractions were present, although lessening, during the three weeks of hospitalization.

The respiratory pattern and the artificially induced hypothermia provided adequate oxygenation and CO_2 escape. After the twenty-first day sedation was gradually withdrawn allowing short periods of consciousness. On the twenty-fourth day the nasogastric tube was removed. The tracheostomy tube was gradually

* *C.H. #50588*

decreased in size and then removed. As compression fractures of the spine occur as complications of tetanus, an x-ray examination was made of the vertebrae before physical therapy was instituted. The program of physical rehabilitation was started during the last week of hospitalization. The patient was discharged on the thirty-third day with arrangements for outpatient surveillance of his convalescence and continued rehabilitation. At the time of discharge mild generalized muscular stiffness was present, but his gait, speech, and course movements were all well performed. Immunization with tetanus toxoid was accomplished during the convalescent period.

Discussion

William Curtis Adams, M.D.

The principle of care of a patient with tetanus is the correction of the variations in normal physiology that occur. Put in other words this is the principle of good supportive medical care. Figure 1 lists the routes of attack in patient care.

Figure 1

Principles of Therapy of a Patient with Tetanus

1. Prevention and therapy of the complications of fixed exotoxin
   - A. Maintenance of cardiorespiratory exchange
   - B. Maintenance of the indicated caloric balance
   - C. Maintenance of adequate excretion of waste products
2. Removal of the source of exotoxin
   - A. Surgical Debridement
3. Neutralization of the nonfixed exotoxin
   - A. Infiltration of wound area with tetanus antitoxin
   - B. Parenteral administration of exotoxin

It should be remembered that most victims of generalized tetanus die of respiratory complications or failure to provide adequate cardiorespiratory exchange. Early tracheostomy can provide easy access to the air vessels only if the principles of tracheostomy care are understood and carried out. (Fig. 2)

Figure 2

Tracheostomy Care

1. Separate catheters for nasal-oral suction from those used for endotracheal suction
2. Scrupulous cleanliness of suction tubes (whistle tip catheters)
3. Use of "Y" tube between source of suction and catheter to permit release of suction insertion, etc.
4. Each aspiration limited to fifteen seconds
5. Remove catheter gently with 360° rotation
6. Release pressure if catheter "grabs"
7. Aspiration of both main stem bronchi
8. Maintenance of nonobstructed tracheostomy tube

At the time of a single general anesthetic the following steps can be accomplished:

1. Surgical debridement of the area of infection
2. Performance of a tracheostomy
3. Installation of a polyethelene nasogastric feeding tube or a gastrostomy tube
4. The local and parenteral administration of sixty to one-hundred-twenty-thousand units of tetanus antitoxin
5. A cleansing enema if fecal impaction is present
6. Parenteral administration of appropriate antimicrobial agent

Long Term Active Treatment

Anticipation of continuing heavy sedation for one to five weeks makes supportive care paramount. (Fig. 1)

Special nursing care is required for the care of these patients, and the personnel must understand the care of tracheostomies as well as the usual nursing procedures. Ventilation must be maintained.

Blood pressure recordings are made frequently, as hypertension may reflect a ventilatory deficit.

The choice of a hypnotic sedative agent will largely be determined by the experience of the attending physician. In general, barbiturates, paraldehyde, and chloral hydrate have each been used successfully. Ether in oil rectally has also been satisfactory. Depression of respirations must be recognized and compensated for, if present. The muscle relaxant drugs such as the curare-like preparations should be considered in some cases. The use of both the sedative agents and the muscle relaxants demands a thorough understanding of ventilatory problems and maintenance. Hypothermia may be a useful adjuvant to the maintenance of adequate ventilation. This can be accomplished with ice packs or freezer blankets. A darkened, quiet room and minimum handling are necessary to lessen the incidence and severity of spasms. If the patient is awake, the tranquilizing agents may reduce apprehension and the meprobomate group can aid in muscle relaxation.

The long term maintenance of nutrition is best accomplished by the use of an indwelling nasogastric tube or gastrostomy. Calculations for water and nutrients should be based upon the individual's metabolic state. A regular type diet which has been pureed in a mechanical

blender can be satisfactorily administered in appropriate amounts through either a nasogastric or a gastrostomy tube.

If periodic bladder drainage is not accomplished physiologically, it must be provided artificially. Fecal softening agents should be used to prevent fecal impaction. The status may be checked by digital rectal examination. *Alex J. Steigman, M.D.*

Convalescent Treatment

Once the acute phase has past the patient and his family must be given an understanding of what to expect during convalescence. Roentgen examination of long bones and the spinal column should be performed to locate unnoticed fractures incurred during severe muscular contractions. Compression fractures of the vertebra are among the most common. A physical rehabilitation program will enhance the return of normal muscular function. Arrangements for active immunization against tetanus must be accomplished.

Prophylaxis

Tetanus is a preventable disease. The efficacy of active immunization with tetanus toxoid has been proven repeatedly. Only twelve cases of tetanus occurred among the American Armed Forces from 1941 to 1945, although Glenn reports on the high incidence of this disease among nonimmunized natives during the recapture of Manila. There were one hundred fifty-six cases of tetanus among eleven hundred wounded natives, while not a single case occurred among the wounded American soldiers who sustained similar injuries in the same environment.

Active immunization against tetanus is indicated in all children, and in adults subject to minor abrasions. It is particularly important for those potentially sensitive to horse serum. The recommended dosage for primary immunization is 0.5 cc im. for two injections—at least one month interval (not more than four months). Booster immunizations are recommended at the end of one year and then at three year intervals. Recall boosers of fluid toxoid are recommended if a wound occurs in a previously immunized person. Nonimmunized people treated on the day of an accident should receive tetanus antitoxin:

1. 1500 units are recommended for a child of 15 kg. or less
2. 3000 units are recommended for a child between 15 and 30 kg.
3. 5000 units are recommended for those over 30 kg.

This should be followed by active immunization.

In summary the succesful therapy for tetanus is dependent upon the application of the principles of supportive care with particular attention to the maintenance of normal ventilation.

> I would single out for praise the physician who particularly excels in the treatment of acute diseases, for these cause the greatest number of deaths. By acute diseases are meant the conditions which earlier doctors have named pleurisy, pneumonia, brain-fever and *causus*, and conditions resembling them which usually show continued fever. For in the absence of an epidemic of a disease of the plague type, many more die of these conditions than all the others together.
>
> —*Hippocrates*

SPECIAL ARTICLES

Not You Alone*

EDWARD B. MERSCH, M.D.
Covington, Ky.

YOU are about to conclude your studies at the Medical School. For all of you, it will bring an achievement for which you have worked hard and long. For both you and your family a great pride will descend on you. Your friends and neighbors will look up to you. You have achieved success. You are now a Doctor of Medicine.

Have you ever sat down and asked yourself why? Why did you study medicine in preference to any other type of work or profession? For some the answer is easy. Perhaps someone in your family is or was a doctor. Perhaps your parents always wanted a doctor in the family. Or perhaps you were impressed years ago by your family doctor, and decided to follow in his footsteps. Or perhaps you saw Medicine as the noblest of all professions; one in which you could help mankind. God, Religion and Medicine are the greatest of all comforts to a suffering man. Whatever your reasons, you have arrived.

That First Year

Let us review your past few years for a moment. As you entered Medical School, the learned Sophomores tried to impress upon you how hard the Freshman year was, and that you were probably not intelligent enough to make it. But you plodded on, and finally you found yourself giving the same type of advice, encouragement or discouragement to the new Freshman Class. You probably also found time for criticism of your previous year's professors. What a bunch of jerks! You knew they taught the courses badly, and among yourselves boasted how the class should be taught.

And then you suddenly realized you were Sophomores—that you had your own problems. You began to study something about disease—even if it was only in pathology. You began to understand a little better why you studied anatomy and physiology. You began to connect disease processes with these, and all the while you studied pathology, you probably ran the gamut of diseases—especially if you correlated the clinical picture with the one of pathology. The majority of you, at one time or another, found yourself suffering with a multitude of diseases, both singly and in groups. Some of you were sure you would succumb before you even finished the year. But as the year progressed, you began to cast off your imagined illnesses, and began to realize just how smart you were. You began to know a lot, and you even ventured out and told your friends what was wrong with them. You almost considered yourself a consultant.

Third Year

The third year saw you visiting with some sick patients. You tried to impress upon the clinic inhabitants, that you were a doctor and were there to treat them. They knew better, (your white coat with your name on the jacket gave you away) but the majority answered your questions and listened to your advice. It was during this time, that you began to realize that the patient and the diseases didn't always follow the book. You began to realize that medicine is not an exact science. You began to wonder if you would ever be able to cope with the numerous medical problems.

And then you became a Senior—the last year for didactic lectures—the year before your internship. You again started to be sure of yourself—you began to realize how smart you are. Some of the usual duties on the wards became chores. Some of the lectures were useless, and you began to quote articles to the clinicians, perhaps you even tried to trap him; all the while you were gathering a little more

Address of the KSMA President at the fourth annual Senior Day in Louisville on April 21, 1958.

knowledge, unconsciously storing it for future reference.

Internship

And you thought of your internship. You applied early. Some of you sought places where you might better learn, some looked for places which offered the highest stipends, others looked for places which might offer spring boards to residence training, some were guided by apartments, vacations and time off, but all of you have sought an internship.

More Responsibility

You will find the internship a continuation of your training. You will begin to accept responsibility. You will begin to have more intimate contact with your patients. You will begin to realize some of these patients are your teachers also. They will continually offer problems, and if you are to be successful, you will study these problems. You should read and read again. You will begin to associate symptoms and findings. You will begin to compare those of one patient with another. You will begin to realize that nothing takes the place of a good history and physical examination. You will begin to associate these with the laboratory studies, and you will begin to realize the discrepancies between the clinical and laboratory findings at times.

The Art of Medicine

It is during your internship that you begin meeting the families of the patient. You will begin to realize that the patient is not just another statistic, a number, a case; you will find he is a human being, a member of a family, a member of society with a problem. He has come under your care for help, for treatment, for a kind word. Be sympathetic with him, try to help him, listen to his problems. Don't be rude. Realize he is sick, or he wouldn't be there. Be kind, learn to do the little things that make for more comfort. A pillow adjustment, the loosening of a too tightly drawn sheet, a drink of water, the holding of an emesis basin while he is vomiting, the placement of a urinal or bedpan—these are some of the little things that make for better comfort, for more well being. These are the little things the patient remembers, these are part of the art of medicine.

Be courteous, be gentle, and be thorough. Learn to take a good history. Be careful and complete in your examination. Learn to respect privacy. Don't be rough with your manipulations. Gentleness is an art, learn to cultivate it. Be complete in your appraisals, study the case, don't be afraid to seek help or consultation, be sound in your judgment, and firm in your convictions, and follow the case to completion. Learn to be lenient, find out the cost of drugs and laboratory procedures, don't bankrupt the patient. Don't become a "blotter doctor," remember the drug houses are in business and are promoting their products. Find out if a less expensive drug will suffice. Learn to use your senses and common sense.

Be Considerate

Be considerate of the dying. It is your duty to inform the family and the patient of impending death. He or they may have some religious or legal matters to settle while consciousness still prevails. Don't be afraid to recommend a visit by a priest, a minister or a rabbi. Respect the religious views of the patient and his family.

Treat the dying with respect. Avoid loud and boisterous talk. If possible a quiet room in a peaceful atmosphere is a fitting climax for a departure from this life. Be considerate of the family, be gentle in your remarks, discuss the illness with them, don't be brusque or rude, be honest with yourself, the patient and the family.

When a patient dies, speak with the family, be considerate, remember they are under an emotional strain—they have just lost a loved one. It is at this time of high emotional excitement, that a request for permission to perform an autopsy is made—when tender sentiments evoked by death offer strong opposition to any procedure which will entail indignity or mutilation of a loved one. To be successful, the effort must be backed by appeals based on ethical and practical reasons known to the profession, but inadequately realized by the public.

A Noble Profession

The doctor making the request is in a favorable psychological position. He is a member of a noble profession whose members for centuries have battled sickness and death. He has a heritage of prestige compounded by gratitude and respect. The family is indebted to him and the hospital staff for the care given to the patient, and despite the repugnance aroused by his request, realize that he is pleading a noble cause —the opportunity to carry on, with their permission and cooperation, the battle to save those similarly afflicted.

Don't request an autopsy in the patient's room or ward. Take the family to a portion of the hospital not too intimately associated with the deceased. Ask the family if you can be of any help to them, and then gradually lead the discussion to the matter at hand—the autopsy.

Some of the arguments in favor of an autopsy are the duty to humanity to further medical knowledge, the determination of the cause of death, the extent of the disease, medicolegal causes, the rarity of the disease, an aid to research, and an evaluation of treatment. Know the counter arguments and be able to refute them, and believe in it yourself. Also know the law of your State concerning autopsies. In Kentucky, permission for an autopsy can be granted only by the closest relation.

Also you must become familiar with the coroner cases. In the event that death occurs within ninety days from violence, it is the duty of the Coroner to hold an inquest, the same as if death had occurred immediately. The Coroner cannot perform an autopsy unless an authorized person requests it, or he has reason to believe that a crime has been committed.

Ambition Realized

Finally, after your internship or residence, you are ready for the plunge. You are actually going into practice. You are setting up an office for the treatment of the sick and injured. Your life's ambition has finally arrived.

But has it? Many times in your life you will sit back and reflect. You will think of your struggles through school and your post-graduate training. You will appraise the present and look into the future. You should become a thinker, a leader. Follow the footpaths of the great men before you. Profit by their successes and failures. Remember you are but a small cog in the vast wheels of the universe. Remember there is always one greater than you, and above the most noble man there is always the greatest physician of all—God. Don't be afraid to call for His help, it is no sign of weakness, you will be a better man for it.

A Guiding Light

Throughout the history of man, the physician has been prominent in raising civilization from barbarism. The physician has always been the guiding light in man's grim struggle against the passions and ambitions, the weaknesses and strengths, the hatreds and loves, the humanities and inhumanities of people. It has been the lot of the physician to lead man from the superstitious and occult meanderings of the past. It was he who sought the cause of epidemics, and then tried to wipe them out.

The physician is a man composed of observation, reason, courage and understanding, to whom the people turn instinctively to help them solve their problems; both material and immaterial. He is the possessor of the proudest title—doctor—physician. Learn to live up to it, respect it. Some people will almost show God-like reverence to you, don't fail them. Work hard at your profession, be honest and courageous, and if you find yourself unworthy of the title—doctor—be man enough to get out of the profession, don't bring shame on your nobler brothers—for our's is a noble profession.

Both Teacher and Student

Remember you are both a teacher and a student. Your personal influences will affect many. You must continuously study, to sift the problems, to analyze the facts, to promulgate the truths, so that in both your studies and teachings you will become a greater physician.

Don't be an idler. Keep busy! Detach yourself from the pursuits and pleasures of youth. You have reached maturity. Be a man in your actions and deeds. Learn to overcome obstacles. Work never killed anyone, and you will find that work brings a 'heap of pleasure.' Develop a method in your labors, and your pleasures will be multiplied.

Noble Ancestry

Your profession is an art based on science. It will never become an exact science, for there is a constant changing and mutation in nature. And each change or mutation cultivates its own problems with a constantly ever-changing disease pattern, altered or eradicated in part or wholly by the like progressive methods of treatment. The treatment of disease is merely an attempt to keep nature in bounds or to restore it to normal.

Medicine has a noble ancestry. The Hippocratic school laid the foundation of modern medicine. They were the ones who lifted medicine from the shackles of the priesthood and caste. It was there that medicine was conceived of as an art based on observation, and as a science associated with nature. This school believed that medicine was a profession of gentlemen versed in the arts and sciences, and as-

sociated with high standards of morals and ideals. Today we still use and believe in the text of the Hippocratie Oath. Remember its principles, and don't defame it's eharaeter.

Progress

Medicine has been noted for its solidarity in the treatment of disease throughout the world. Universally the doetor is ever striving to seek out the eauses of our ills, to eorrelate the findings so that our knowledge may increase, thus aiding the profession in the eure and prevention of disease.

Medieine has always been progressive. It always has its eyes on new horizons. New developments are eonstantly in the making, and when these are found, the knowledge is disseminated world-wide. The reward for the diseoverer of new proeedures, methods, and eures, is one of glory—not one of material wealth. So it shall remain. For our profession is a eharitable one. It is our lot to dispense the works of Charity, to distribute the endowments given us by God and our predeeessors. Keep your trust intaet.

Avoid Self Satisfaction

Do not beeome self-satisfied. Have a pride in your aehievements, but do not become an egotistieal ass. A sense of self-satisfied superiority over others leads to bigotry and prejudice. It may so elose your mind to the truth, that you beeome intolerant of the ways and thoughts, deeds and aetions, of others not in aeeord with you. Keep an open mind. Learn to latch onto the pearls and spit out the pebbles.

You must eontinually study. Reading broadens the mind. It opens new ehannels for learning. Vary your subjeet matter. Study the subjects in your own speeial field, but read the other branehes of medicine also; you eannot help but gain by it. Also learn to read things other than the scienee of medicine. Reading offers relaxation. It should be a lifetime work and hobby. It is a must if you are to wage a sueeessful fight against the ignoranee and folly among the elasses of people who are forever trying to wreak ruin on your profession, your life and your eountry.

Learn To Evaluate

Keep your eyes and ears open. Learn to think elearly. Understand the problem. Evaluate the findings. Don't be taken in by the rabble rousers. New methods and programs may appear to be all right on the surfaee, but open them up and evaluate the entire program, not just the glittering surfaee. Don't buy a gilded brick or a pig in a poke, because you were too lazy to read, to investigate, to study and to think elearly. Study the new programs in the light of the past. Realize the present is just ahead of the future, and try to visualize the benefit or laek of benefit a program has for the future, both for you and for coming generations. A quotation from Baltasar Graeian is appropriate here.

> *"Know how to say No. Since you cannot accede to everything, or to everybody, it becomes important to know how not to accede; and especially for those who command; for here enters manner. The No of one man is more esteemed, than the Yes of another; for a No that is gilded may be more satisfying than a Yes unembellished. There are many who carry an eternal No in the mouth with which they spoil everything. It always comes first, so that even when later they grant everything, such answer gives little satisfaction, because of the bad taste provided by the first. Refusal should never be flat, the truth appearing by degrees, nor should it be absolute, for that would cancel dependence, wherefore some remnant of hope must be kept alive, to sweeten the bitterness of the refusal. Employ courtliness to fill the void of the denial, and let pleasing words disguise the failure of action. Yes and No are quickly spoken, but they demand consideration."*

Be Unselfish

Don't be selfish. It might apparently be to your benefit at the moment, but in the end you are the loser. A selfish man does not think elearly. His cerebrations are elouded by greed, and greed is the root of all evil. A selfish, greedy individual has a warped mind, and does everything for a personal gain only. His avariee for wealth and personal glory soon eloses the door to the understanding of those about him. He soon beeomes a "sore thumb" stieking out in soeiety. He is tolerated, but disliked. He is shunned whenever possible. He is a stranger in his own eommunity. He is an unwanted guest, who has forgotten "you ean't take it with you." In medieine you do not seek riehes, but the riehes will find you. A well fulfilled life is a happy life—a rieh one. A doctor asks nothing—wherefore he gets everything.

Contemplate

Contemplate then why you became a physician. You entered Medicine for one reason only —to care for the sick. You are a physician, because the patient is a human being. You must always remember the sick man is a patient. He is not a case. He is not a chart—a statistic. He is not just so many milliequivalents of this, or so many units of that, he is not a reactor to this, or a defense mechanism to that. He is a patient. He is a sick human who has come to you for help. The patient does not care about your science; what he wants to know is, can you cure him? These patients are scattered throughout the world. They are not limited to so-called medical centers. Go out into the highways and byways and the patient will find you, you do not have to find him.

Remember your fellow physician. It is he with whom you must live, with whom you must work. Be friends with him. Don't criticize him! Be honorable to each other. No man is so stupid in everything, that you cannot learn something from him. Your diagnosis and treatments may differ, but you are both striving for the same thing—the relief or cure of the patient. Don't be guilty of condemning a fellow physician unless you know all the facts and circumstances, and remember, he has his side of the story also. Remember, if a patient condemns another physician to you, that he will be castigating you to a third one later on. Keep faith with each other, and be honest about it. Don't be guilty of causing a malpractice suit by your careless, casual or unwarranted remarks. Don't find yourself being prosecutor, judge and jury —you may find yourself at fault. Temper your judgments with mercy.

Assume Your Responsibility

Remember your county and state medical societies. Join them, work with them and respect them. They were in existence before you. They have fought your battles before you were. They have helped to make the Medical Profession what it is today. Don't turn your back on them. Remember you are part of them. Assume your share of the responsibility—there is enough work for everyone—help carry the load. It is only through such organizations that we can continue to have the finest medical service of any place in the world. Let's keep our noblest of professions intact in the greatest land in the world—the United States of America. Keep ever vigilant, lest the Social Planners lead you down the path to eventual ruin. Be skeptical of medical plans, unions, foundations, etc., however gleaming on the surface, for they might be the harbingers of destruction for a true and tried method of the practice of medicine. Beware of the third party in medicine. Socialized Medicine is mean medicine. A dictator may disfranchise the doctors, but a week of influenza will re-enfranchise them.

Keep Informed

Keep yourself informed, know the issues, be honest with yourself and your fellow man, think correctly, act courageously and intelligently, call on God for guidance, and you will realize—It is not you alone.

EDITORIALS

Clinic Formed to Help Solve Long-Time Problem

THERE are about 3,000 cases of cleft palate and hare lip deformities in Kentucky with more than 100 being added each year. Most of these are in families unable to pay for adequate services if they were available.

The repair of these deformities has advanced greatly within the last few years since the inauguration of a team approach to the problem. This approach is by a group of people equipped in their respective fields, examining the patient as a group and deciding the next step in therapy, as a group decision. This team consists of a medical man, a plastic surgeon, an E.N.T. man, a prosthodontist, a pedidontist, an orthodontist, a speech therapist, a psychologist and a nurse.

Because of this great need the Rotary Clubs of Western Kentucky, in conjunction with the Kentucky Crippled Children's Commission, began such a program in July 1957 for all people unable to pay for such services. As the program progresses consultation services would be extended to physicians if desired, for patients with these deformities, who could pay for these services. The desire of the group is to help the physician and not to take patients from the physician. Whenever possible the recommended treatments are to be carried on in the home communities, but when such services are not available the services of the group would be utilized.

Because of the pioneering of this project it was thought that one group be first started to find the short cuts to this care. Subsequently it is hoped to have a similar group in all strategic centers in the state to care for patients in the surrounding territory.

There has been much interest in this program by many other groups with active case finding activities. This is greatly appreciated by those interested in the inception of this work, but it must be explained that no patient can be accepted unless it is certified by a physician or the local county Department of Health.

The demands for this service have been tremendous so that the clinic is hard put to keep up with the case load. It is hoped that in the not too distant future groups can be extended to other communities within the state. In the meantime, all people interested in this approach are cordially invited to come to the clinics and observe the group go through the process of decision on each case. This clinic meets on the first Tuesday of each month at the out-patient department of the Kosair Hospital in Louisville.

If anyone should like any additional information concerning this program write to the Director of the Clinic, c/o Kentucky Crippled Children's Commission, 1405 East Burnett Avenue, Louisville 17, Kentucky, and any information available will be gladly given.

Harry S. Andrews, M.D.

Opinions expressed in contributions to The Journal are those of the writers and do not necessarily reflect the views of the Kentucky State Medical Association.

Doctor Price Speaks*

ON OCTOBER 1, 1957 Doctor Julian P. Price of Florence, S. C., a trustee of the AMA addressed the American Hospital Association convention in Atlantic City on "The Health of the Nation." His opinions were not his own exclusively, but were drawn in part from consultation with 59 physicians representing the various fields of medical activity over the entire country.

His questions to these physicians were: What are the factors which have brought about the greatest changes in medicine and in the health of our nation in the past 30 years? What are the strengths and weaknesses of medicine and of the health of our people? What changes, good and bad, may come in medicine in the next 30 years? Opinions and conclusions regarding these points are well worth calling to our attention.

In 1925, 72 out of every thousand babies in this country died before reaching the age of one year; in 1955 this number was 26. During the same period, the maternal death rate had decreased from 65 to 5 per 10,000 births. The death rate from tuberculosis had dropped from 130 to 8 per 100,000 in a 30-year-period. Immunizations, improved sanitation, and anti-infective agents had reduced miraculously the number of deaths from infections and venereal diseases. Mental disease has come to be regarded no longer as a stigma, and is treated with an optimistic outlook never before thought possible. Life expectancy has increased from 59 years to 69.5 during these three decades.

Hospital facilities in every state and almost every community have been expanded under the stimulus of the Hill-Burton Act and other agencies until there are now more than 1,600,000 hospital beds in this country. One out of every eight persons is hospitalized during any year. Over 110 million citizens have hospital expense insurance, 103 million have surgical protection, and 67 million have insurance that covers regular medical expense.

Improvement in standards of living has played no small part in our better level of health. Shorter working hours, slum clearance programs, rural electrification, improvement in preparation and preservation of foods, better sanitation, and better transportation facilities are but a few of the more important factors responsible.

Participation of the Federal Government has had a strong influence on the course of medical care. Today, nearly one out of every four persons—including 22 million veterans—is eligible for some degree of medical care which is either provided or paid for by the federal government. Yet we have been able to prevent federalization of medical practice in toto as advocated so vigorously by so many persons and agencies during the past two decades. To resist and prevent total socialization of medical practice has been and remains a major problem.

Freedom is our greatest strength. The practice of medicine has been, and still is, a parcel of the competitive system of free enterprise. The patient is still free to choose his own physician and the physician his patient. Standards of medical education in this country today are those which have been established by the medical profession, not those promulgated by outside influences.

The future of public health and of medical practice is a major concern of the population as a whole. The strong worldwide trend toward socialism will have its infuence, for good or evil, upon this profession, as well as upon all other human activities. Thus we can only hope to guide toward further improvement rather than toward deterioration as has occurred in other countries. We as physicians must be alert to promote that which is good and oppose that which is bad. Constant vigilance and the same untiring efforts toward progress which have characterized the past 30 years will be the price of success.

Sam A. Overstreet, M.D.

Copies of Dr. Price's stimulating address are available at the AMA office.

ORGANIZATION SECTION

Guest Speakers for '58 Session Announced by Dr. Mersch

Twelve guest speakers from throughout the nation will participate in the general session of the KSMA Annual Meeting in Louisville on September 23, 24, and 25, according to an announcement from Edward B. Mersch, M.D., Covington, chairman of the Committee on Scientific Assembly and Arrangements.

All of the guest speakers, with the exception of the dental speaker, will participate in their respective specialty group sessions on Wednesday, September 24.

Included in the roster of guest speakers will be George J. Hamwi, M.D., associate professor of medicine and head of the division of endocrinology and metabolism, College of Medicine, Ohio State University, who is the guest of the Kentucky Chapter, American College of Physicians. He will discuss "The Pregnant Patient" as part of a panel on Tuesday morning and that afternoon will give a talk on "Endocrinology for the General Practitioner."



Dr. Hamwi

His topic before the specialty group on the 24th will be "Recent Concepts in the Diagnosis and Treatment of Thyroid Disorders." Co-author of numerous articles, Doctor Hamwi is a diplomat of the American Board of Internal Medicine.

Laurence L. Robbins, M.D., Boston, guest of the Kentucky Radiological Society, will talk on "The Diagnosis of Infra-Pulmonary Effusion" at the general session on Tuesday morning. He is radiologist-in-chief at the Massachusetts General Hospital and associate clinical professor of radiology at Harvard Medical School.



Dr. Robbins

Doctor Robbins, who is president-elect of the Radiological Society of North America and a trustee of the American Board of Radiology will speak on "The Importance of Recognizing the Soft Tissue Abnormalities in Radiological Diagnosis" before the specialty group on Wednesday.

Jerome Glaser, M.D., will discuss, "Symptomatic Treatment of Bronchial Asthma in Infancy and Childhood" before the general session on Thursday morning. Doctor Glaser is clinical associate professor of pediatrics at the University of Rochester School of Medicine and Dentistry.



Dr. Glaser

He will read two papers before the specialty group meeting of the Kentucky Chapter, American Academy of Pediatrics. His topics will be "Differential Diagnosis of Eczematoid Dermatitis in Infancy and Childhood" and "The Prophylaxis of Allergic Diseases in Infancy and Childhood."

Committee Releases Program of Annual Meeting

The KSMA Committee on Scientific Assembly and Arrangements, headed by Edward B. Mersch, M.D., Covington, KSMA president, has announced the following tentative program for the 1958 annual meeting on September 23, 24, and 25.

Tuesday, September 23

8:45— 9:00 Opening Ceremonies

9:00—10:00 Panel—"The Pregnant Patient"
Frank R. Lock, M.D., Moderator
Kentucky Ob-Gyn Society Guest Speaker

George J. Hamwi, M.D.
College of Physicians Guest Speaker

Donald Hamilton, M.D.
Psychiatric Association Guest Speaker

E. J. McGavran, M.D.
Public Health Physicians guest speaker

10:00—10:30 Visit Exhibits

10:30—10:50 Subject to be announced
Kenneth R. Craft, M.D.
Eye, Ear, Nose & Throat Society Guest Speaker

10:50—11:10 "Public Health and Medical Practice"
E. J. McGavran, M.D.
Public Health Physicians Guest Speaker

11:10—11:30 "The Diagnosis of Infra-Pulmonary Effusion"
Laurence L. Robbins, M.D.
Kentucky Radiological Society Guest Speaker

11:30—12:00 President's Address
12:00— 2:00 Lunch
2:00— 2:20 "Endocrinology for the General Practitioner"
George J. Hamwi, M.D.
College of Physicians Guest Speaker
2:20— 2:40 "Spontaneous and Habitual Abortion"
Frank R. Lock, M.D.
Kentucky Ob-Gyn Guest Speaker
2:40— 3:00 "The Problem of Suicide in General Practice"
Donald Hamilton, M.D.
Kentucky Psychiatric Association Guest Speaker
3:00— 3:30 Visit Exhibits
3:30— 5:00 Color TV

Wednesday, September 24

9:00—10:00 CPC
10:00—10:30 Visit Exhibits
10:30—11:40 Color TV
12:00— 1:30 President's Luncheon
2:00— 4:30 Meetings of Specialty Groups

Thursday, September 25

9:00— 9:20 "Symptomatic Treatment of Bronchial Asthma in Infancy and Childhood"
Jerome Glaser, M.D.
Pediatric Society Guest Speaker
9:20— 9:40 "Oral Manifestations of Systemic Diseases"
Harold E. Boyer, D. D. S.
Dental Speaker
9:40—10:00 "Open Heart Surgery"
Dwight C. McGoon, M.D.
Chest Physicians Guest Speaker
10:00—10:30 Visit Exhibits
10:30—12:00 Color TV
12:00— 2:00 Lunch
2:00— 3:00 Panel—"Geriatrics and Surgery"
Arnold Griswold, M.D., Moderator
Kenneth K. Keown, M.D.
Anesthesiology Guest Speaker
Oglesby Paul, M.D.
Academy of General Practice Guest Speaker
General James Forsee
College of Surgeons Guest Speaker
George A. Garceau, M.D.
Kentucky Orthopedic Society Guest Speaker
3:00— 3:30 Visit Exhibits
3:30— 5:00 Color TV

KAGP to Hold Kenlake Seminar on July 10

The program of the 1958 Kenlake Seminar of the Kentucky Academy of General Practice on Thursday, July 10, has been announced by Harry U. Whayne, M.D., Murray, chairman.

Registration fee for the meeting will be $5, and there is a charge of $4 per person for the smorgasbord dinner which will follow the scientific program.

The complete program follows:

1:30 p.m. "Common Abdominal Surgical Conditions in Children," Hugh Lynn, M.D., Louisville
2:15 p.m. "Fluid Balance," Frank L. Lyman, M.D., Evansville, Indiana
3:00 p.m. Intermission
3:30 p.m. "New Developments in Muscle Relaxant Therapy," A. Lee Lichtman, M.D., New York City
4:15 p.m. "New Developments in Diabetic Therapy," George Hamwi, M.D., Ohio State University, Columbus, Ohio
5:00 p.m. Intermission
6:30 p.m. Social Hour and Smorgasbord Dinner

U of L Gets $500,000 U. S. Grant for Clinical-Research Building

The University of Louisville School of Medicine has been awarded a $500,000 grant for a new clinical-research building by the U. S. Public Health Service. The building is to be erected with matching local money in the proposed Medical Center area.

U of L Vice President Woodrow Strickler who announced the federal grant also said that another $500,000 in federal funds to be matched by local funds would be sought for a basic-science building.

Under the agreement the U of L must provide a like amount of funds for the buildings. He did not say how the U of L planned to raise the money, at the time he made the announcement, however, several months ago he said, "We will have to solicit it from the public or borrow it."

Plans for Cumberland Falls Meet Near Completion

Plans for the joint meeting of the 12th and 15th Councilor Districts at the duPont Lodge, Cumberland Falls, on Thursday, June 19, are in their final stages, according to Garnett Sweeney, M.D., Liberty, and Keith P. Smith, M.D., district councilors.

Featured on the program will be: Edward B. Mersch, M.D., KSMA president, and four members of the University of Louisville School of Medicine faculty. The complete program of the meeting appeared in the May issue of the Journal.

Members of the AAGP will be interested to hear that the program has been approved for three hours of Category 1 credit.

There are 18 counties included in the two districts. The 12th District includes: Boyle, Casey, Clinton, Garrard, Lincoln, Mercer, McCreary, Pulaski, Rockcastle, Russell and Wayne counties. Included in the 15th District are: Laurel, Whitley, Knox, Clay, Bell, Leslie and Harlan.

Second District Hears Dr. Mersch

Fifty-four physicians and their wives attended the annual dinner meeting of the Second Councilor District at Gabes Restaurant in Owensboro on Wednesday, May 7, according to Walter L. O'Nan, M.D., Henderson, district councilor.

Featured speakers were President Edward B. Mersch, M.D., Covington, and George Pedigo, Jr., M.D., Louisville. Doctor Pedigo presented the scientific portion of the program.

Dr. Baughman Elected Member of Blue Shield Commission

Branham B. Baughman, M.D., Frankfort, was elected to membership on the National Blue Shield Commission at the 1958 Conference of Plans in Chicago, April 27 to May 1.



Four members, including the new commissioner, of the Board of Directors of the Kentucky Physicians Mutual Inc., the Blue Shield Plan for Kentucky, along with the Executive Director and Medical Director attended the conference, which was held at the Edgewater Beach Hotel.

Doctor Baughman replaces Donald Stubbs, M.D., who was elected commissioner at large, as commissioner from the Fifth District. This District includes five states and the District of Columbia. Sixteen Blue Shield Plans are operating in the Fifth District.

A past president of the Board of Directors of the Kentucky Physicians Mutual, Doctor Baughman is now serving as treasurer of the Board. He is the KSMA Councilor from the 7th Councilor District and past chairman of the Council.

County Society Cooperation Urged in State Food Conference

All county societies are urged by the KSMA Committees on Rural Health and the Committee on Dietetics to cooperate by sending members of their society to the State Food Conference, sponsored by the Kentucky Farm Bureau Federation, at the Kentucky Hotel, Louisville, on Tuesday, June 17.

The importance of physician interest in the problem of better diets for the people of Kentucky was stressed by Wyatt Norvell, M.D., New Castle, chairman of the Committee on Rural Health, and Maurice Kaufmann, M.D., chairman of the Committee on Dietetics, who asked the assistance of all members on a local level.

They requested that each Society contact its farm bureau or county agricultural agent and offer its services, since committees are being formed in each county. The committees will be composed of the president or secretary of the county medical society, the president of the county farm bureau, the county agricultural agent, and representatives of the homemakers council and vocational agriculture.

Primary aim of the conference, which will be called the "Food Comes First Conference" will be to emphasize the importance of better diets for the American people. Governor A. B. Chandler, will be luncheon speaker and other participants in the day-long program will be authorities in the food field.

The state conference will be patterned after the National Food Conference held in Washington on February 24, which had President Eisenhower, Vice President Nixon, and AMA President David B. Allman, M.D., on the program.

Results of Dues Survey Announced by Washington Association

Following are the results of the survey on "1958 State Dues and Assessments" conducted by the Washington State Medical Association which reveals that of 48 associations, 13 had the same or a lower amount of assessment than the KSMA. States are listed according to amount.

$140—Utah
100—Nevada
85—Iowa
75—North Dakota, South Dakota, Wisconsin
70—Arizona, New Mexico
60—Colorado, Michigan
55—Maine, Minnesota
53.5—Montana
50—Alabama, California, Delaware, District of Columbia, Louisiana, Oregon, Rhode Island, Texas
45—Mississippi, Vermont
42—Oklahoma
40—Florida, Georgia, Idaho, Illinois, Indiana, Kansas, New Hampshire, New Jersey, North Carolina, Pennsylvania.
35—Kentucky, Massachusetts, Missouri, Nebraska, Washington
33—Connecticut
30—Arkansas
25—New York, Ohio, South Carolina, Tennessee, Virginia, West Virginia, Wyoming

Loranz Receives Honorary Degree

The many friends of C. P. Loranz, advisor and professional relations councilor for the Southern Medical Association, Birmingham, Alabama, will be interested to hear that he received an Honorary Doctor of Science Degree from Erskine College in South Carolina at the Commencement exercises on June 2.

Mr. Loranz, who became secretary-manager of the Southern Medical Association four years after its founding and held that position until 1955, is well known to Kentucky members of the SMA.



Discussing KSMA activities during the meeting of the Second Councilor District at Owensboro on May 7 were: Walter L. O'Nan, M.D., Henderson, Councilor for the Second District and Chairman of the KSMA Council; George Pedigo, Jr., M.D., Louisville, who presented the scientific portion of the program; and Edward B. Mersch, M.D., Covington, KSMA president, whose topic was "Alert Yourself."



Congratulating Senior Day dinner speaker Louis M. Orr, M.D., Orlando, Florida, vice speaker of the AMA House of Delegates, (third from left) on his talk were: Richard G. Elliott, M.D., Lexington, Senior Day chairman; Morris M. Weiss, president of the senior class; Doctor Orr; Marvin Lucas, M.D., Louisville, president of the Jefferson County Medical Society; J. Murray Kinsman, M.D., Dean of the U. of L School of Medicine; and Robert Long, M.D., Louisville, delegate to the AMA.

Dr. Rutledge Announces Place for 14th Dist. Meet

The annual afternoon and dinner meeting of the 14th Councilor District will be held at the VFW Club in Hazard on June 18, according to Charles C. Rutledge, M.D., councilor for the 14th District.

Scheduled to begin at 3:30 p.m., the meeting will have three Louisville physicians on the scientific portion of the program and KSMA President Edward B. Mersch, M.D., as dinner speaker.

Physicians and their wives from nine counties are expected to attend the meeting, which is part of the KSMA's continuing program of postgraduate medical education for physicians on a local level. The full program appeared in the May journal.

Council for Health Care of Aged Announces Program

Better health care for the nation's 14 to 15 million aged is the goal of a program announced by the newly formed Council to Improve the Health Care of the Aged, according to Dr. Edwin L. Crosby, director of the American Hospital Association and interim secretary of the Council.

The Council's program is designed to: "(1) increase opportunities for older people to obtain voluntary health insurance coverage, (2) expand health care facilities tailored to the needs of the aged regardless of economic status, and (3) develop more community health services for the aged."

The four sponsoring organizations of the council—the American Medical Association, the American Dental Association, the American Hospital, and the American Home Association—are already starting to implement the program.

The American Hospital Association, in cooperation with the Public Health Service is conducting a conference on the care of patients with long-term illnesses. An American Medical Association committee is working with the American Nursing Home Association in preparing upgraded standards for nursing homes.

A National Conference on Homemaker Services, aimed at reducing the financial expense of disabling illness among the elderly by enabling them to remain at home, is being sponsored by the Department of Health, Education and Welfare and 26 national voluntary associations including the AMA. Six regional AMA conferences have been held to help physicians cope with problems of the aged. A national conference will be held in September.

Dr. Howard Elected President of New Women's Group

Peggy Howard, M.D., Louisville obstetrician and gynecologist, was elected president of the newly formed Kentucky Chapter 49 of the American Medical Women's Association which was organized at a luncheon during the GP meeting in Louisville in April.

About 25 of Kentucky's women doctors formed the club, which has as its purpose the improvement of social and professional relations between women doctors of the state, and service to women medical students. Women interns and residents may be members, but will be exempt from dues. Students will be junior non voting members and will not pay dues. The chapter is affiliated with the national and international chapters.

Other officers of the group, which will meet semi-annually at the time of the GP meeting and the KSMA Annual Meeting are: Letitia Kinsey, M.D., Louisville, secretary-treasurer; Helen Fraser, M.D.,

Louisville, state director and membership chairman at large. Edith Stanley, M.D., Louisville, will formulate the laws and bylaws. There are approximately 90 licensed women M.D.'s in the state.

Breckinridge Resolution Calls for Medical Care Study

Mr. John D. Breckinridge, representative from Fayette County, in the last day of the 1958 meeting of the Legislature introduced House Resolution 131, which authorized and directed a study of medical service plans. The resolution passed.

Section 1 of the resolution provided that a Commission on Medical Service Plans be appointed by the Governor to study provisions for and conduct of operation of health, accident, medical and hospital welfare trust funds and other programs.

The Commission was also directed to study "such provisions, practices, and procedures as may exist with reference to the determination of need and the selection of physicians and hospitals for the treatment of patients."

The Breckinridge Resolution provided that the Commission would be composed of one member selected from three by the Governor from each of the following organizations: the Kentucky State Medical Association, the United Mine Workers, the Kentucky State Hospital Association, the American Federation of Labor, the Kentucky Pharmaceutical Association, the Congress of Industrial Organizations, the Kentucky Farm Bureau, the Chesapeake and Ohio Railroad Employees Association.

In addition, "two representatives to be selected by the Commission as representing the interests of such insurance groups as may be active in the field." The resolution also provided that the "Commissioner of Public Health shall be an ex-officio member of the Commission, and the Legislative Research Commission shall make its services and facilities available to the Commission in the conduct of its study and the preparation of its reports as shall the University of Kentucky."

Soon after the printed resolution was received by the KSMA, the three nominees from this Association were presented to the Governor. As of this writing, the Headquarters Office has received no information on the appointment of the Commission.

The resolution, which was of the type which did not have to be concurred in by the Senate and did not carry any appropriation, called for the first semi-annual report of the Commission to be made on May 15, 1958.

AMA Committee to Study Programs and Association Objectives

A questionnaire inviting suggestions and criticisms of the American Medical Association will be sent out as one of the first projects of the Committee to study AMA Objectives and Basic Programs.

The questionnaire will be based on four points outlined by the AMA House of Delegates last year. They are: "1. redefining the central concept of AMA objectives and basic programs, 2. placing more emphasis on scientific activities, 3. taking the lead in creating more cohesion among national medical societies, and 4. studying socioeconomic problems."



District Councilors J. Vernon Pace, M.D., Paducah, and Ralph D. Lynn, M.D., Elkton, were hosts to the President of the Woman's Auxiliary of the KSMA, Mrs. J. Andrew Bowen, Louisville, and KSMA President Edward B. Mersch, M.D., Covington, at the joint meeting of the 1st and 3rd Councilor Districts at Kenlake on May 8. Doctor Mersch was featured speaker at the meeting.

The questionnaire will be sent to various medical groups and a sampling of more than 3,000 physicians —both members and non-members. Physicians who are members of the committee include: Lewis A. Alesen, chairman, Los Angeles; Thurman G. Givan, Brooklyn; Milford O. Rouse, Dallas; James Z. Appel, Lancaster, Pa.; Hugh H. Hussey, Washington, D. C.; and Raymond M. McKeown, Coos Bay, Oregon.

Drs. Denham and Baron Honored at Annual KAGP Meet

Mitchell B. Denham, M.D., Maysville, was named "Family Doctor of the Year" at the Annual Meeting of the Kentucky Chapter, American Academy of General Practice in Louisville on April 23-25.

Doctor Denham, who was cited in particular for his role in establishing the Mason County Public Health Center which opened in 1951, was given the E. M. Howard award. Another award, given for outstanding research by a Kentucy doctor in the past year went to Charles Baron, M.D., Covington, for research on mental illness based on two articles by him which appeared in the official GP journal during 1957.

The Academy chose Daryl P. Harvey, M.D., Glasgow, as president elect. Charles Bryant, M.D., Louisville, became president at the meeting succeeding William E. Becknell, M.D., Manchester. Chris S. Jackson, M.D., Danville, was elected vice president. John J. Rolf, M.D., was re-elected secretary-treasurer.

Re-elected delegate to the American Academy was Frank L. Duncan, M.D., Monticello. Paul J. Sides, M.D., Lancaster, was elected alternate delegate. New member of the Kentucky Academy's board of directors are: Richard A. Hamilton, M.D., Springfield; Arthur O. Goodman, M.D., Louisville; George C. Reed, M.D., Versailles; John M. Baird, M.D., Danville; Russell L. Hall, M.D., Wheelwright, and Mitchell B. Denham, M.D., Maysville.

4th and 6th Dists. Plan Meet at Mammoth Cave Hotel

Edward B. Mersch, M.D., KSMA president, and four members of the University of Louisville School of Medicine faculty will headline the program of the joint meeting of the 4th and 6th Councilor Districts at the Mammoth Cave Hotel on June 12.

The full program of the meeting was announced by District Councilors W. Keith Crume, M.D., Bardstown, and John P. Glenn, M.D., Russellville, in the May Journal. Physicians and their wives from 24 counties are expected to attend.

KAGP members will be interested to hear that the program of the meeting has been approved for three hours of Category 1 credit by the AAGP.

Students Hear Dr. Orr Speak at Senior Day Dinner

"To a greater degree than ever before, everything the physician does influences the public's opinion of the profession as a whole," said Louis M. Orr, M.D., Orlando, Florida, vice speaker of the AMA House of Delegates and guest speaker at the dinner during the fourth annual Senior Day in Louisville on April 21.

He emphasized the guiding "Principles" of the AMA, saying that the physician has a responsibility not only for the sick, but must look out for the general health and welfare of the community. "Better medicine does not just happen—but comes about when physicians pool their knowledge and put it to practical use," he said.

Doctor Orr praised the KSMA scholarship loan program calling it a demonstration of how "with cooperation and initiative you are working to solve your own problems in your own way."

Another feature speaker on the program was Edward B. Mersch, M.D., KSMA president, whose talk, "Not You Alone" is carried on pages 575-579 in this issue.



Senior Day Chairman Richard G. Elliott, M.D., Lexington, (seated) listens as Carl Cooper, M.D., Bedford, speaks on "The Mechanics of Setting Up a Practice," during the morning session on April 21.

Senior Day is sponsored by the KSMA with the cooperation of the Jefferson County Medical Society and the University of Louisville School of Medicine, to aid seniors in bridging the gap between school and actual practice. This year's chairman was Richard G. Elliott, Jr., M.D., Lexington.

Fed. Disability Insurance Benefits Explained by District Director*

To qualify for disability insurance benefits, the disability freeze, or for benefits as a disabled child, an individual must meet certain non-medical requirements and in addition, must have a medically determinable condition so serious that he cannot do any substantial gainful work. He is responsible for obtaining the necessary medical evidence. This evidence, along with other information on his employability, work experience, education, and training is sent to an agency of his State under an agreement between the State and the Federal Government.

A team of highly trained people in this State agency considers all of the facts and makes a decision as to whether the individual is disabled within the meaning of the Social Security law. This decision is reviewed by the Social Security Administration. A qualified medical consultant evaluates the severity of the impairment and approves the determination at both the State and Federal levels.

When an application is made for disability insurance benefits, or for a disability freeze, or for disabled child's benefits under the Social Security law, the disabled person's name is referred to the State vocational rehabilitation agency. That agency may be able to provide the applicant with rehabilitation services that will help prepare him for suitable work. To assist the rehabilitation agency in determining his work capacity, whether rehabilitation services can actually help him, and what kind of services would be most useful to him. the Social Security Administration will provide the rehabilitation agency with the information secured in connection with the applicant's disability claim.

If an applicant asks to have his social security earnings record frozen, that may be done even if he does not accept rehabilitation services. However, if the application is for disability benefit payments after age 50 or for disabled child's benefits, payments must be withheld if the disabled person refuses without good cause to accept rehabilitation services offered him by the State agency.

Hugh A. McNary, Jr., Louisville
District Manager
Social Security Administration

**This is the second of three articles which will appear in succeeding issues of the Journal. They are being used at the suggestion of the KSMA Committee on Medical Education and Economics to provide members with more information on handling social security claims of their patients.*



Wives and sweethearts of senior medical students at the University of Louisville are shown as they lined up for punch at Senior Day on April 21. Members of the KSMA Woman's Auxiliary were hostesses and entertained the women as their part of the program.

Mental Health Bills Passed by 1958 Ky. Legislature

Several new laws affecting the operations of the Kentucky Department of Mental Health were passed by the 1958 State Legislature, signed by Governor A. B. Chandler, and will go into effect June 19.

One of the laws will allow Kentucky to ratify the Interstate Compact, allowing mentally ill patients to be hospitalized and treated in the state in which it is to their advantage to be treated. Formerly they were hospitalized in the state in which they had legal residence. The new law will save the state money, since it will no longer be involved in lengthy and costly investigations of residence and since it will enable the hospitals to treat and release many patients earlier than has previously been possible.

A law passed on alcoholic commitment now gives Kentucky a legal means of holding alcoholics for treatment, which it did not have previously. Now the law says that commitment may be made in circuit or county court on the petition of the patient, family member, or health officer. After examination by a physician, the court may commit the patient as an alcoholic to a state hospital which treats alcoholics for a period not to exceed 6 months.

Under a new law regarding transportation of mental patients, a hospital may designate the sheriff or other competent person to transport a patient to the hospital and may reimburse him for his expenses. Under the old law, a mentally ill person had to be sent for and transported by the hospital superintendent.

Dr. Mersch at Joint Meeting

Members of the 1st and 3rd Councilor Districts heard KSMA President Edward B. Mersch, M.D., Covington, talk on "Know How to Renew Your Glitter" at a joint meeting at the Kenlake Hotel on May 8.

Word has just been received that the program, which included presentations by four members of the University of Louisville School of Medicine faculty, has been approved by the AAGP for three hours of Category 1 credit. The notification arrived after the meeting, because the original notification was lost in the mail.

Memorial to Honor Dr. Northcutt

Plans to set up a memorial tablet in Devou Park, Covington, in honor of the late Joseph D. Northcutt, M.D., have been made by a group of physicians in Covington. Doctor Northcutt, who died in January of 1956, was president of the KSMA in 1936. He was also founder and first president of the Licking Valley Medical Society.

Alvin C. Poweleit, M.D., Covington, is chairman of the group of physicians which made the request to Glenn Lovern, City Manager. The letter from the group pointed out that Doctor Northcutt was for many years a central figure in the development of surgical treatment in northern Kentucky and had also played a prominent part in the religious, civic, and commercial affairs of Covington.

Harlan M.D.'s Honored on Dr.'s Day

Seven Harlan County Physicians were honored for having practiced medicine locally for 40 years or more at the fifth annual Doctor's Day celebration sponsored by the county society auxiliary at the Lewallen Hotel in April. Those honored were: W. P. Cawood, D. M. Fields, S. H. Rowland, H. K. Buttermore, P. O. Lewis, W. K. Howard, and E. M. Howard.

During the dinner the Society observed a moment of silent prayer in memory of the late M. L. Gunn, M.D., and Clark Bailey, M.D. Special guest of the evening was Mrs. J. Andrew Bowen, president of the KSMA Woman's Auxiliary. The day was officially proclaimed by the mayor of Harlan to honor the county's 65 practicing physicians.



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Digest of Minutes of the KSMA Council Meeting on March 27, 1958*

The Council met in regular session in Lexington, Kentucky, Thursday, March 27, 1958 following the County Society Officers Conference. The Headquarters Office was authorized to express the appreciation of the Council to the Kentucky Surgical Society for its contribution of $1000 for use in the operation of the McDowell Home.

The proposed budget for the fiscal year beginning July 1, 1958 and set up in a day-long meeting of the Budget Committee, was considered. It was stated that the Executive Committee of the Council had carefully gone over the proposed budget and recommended it to the Council. The budget was approved.

Co-Chairman Appointed

The Council accepted the recommendation of the Executive Committee that a second chairman be appointed on the Legislative Committee to handle affairs at the national level. It was felt that it was asking too much of the chairman to handle legislative affairs both at the state and national level. The Council accepted the recommendation that the alternate delegates to the AMA serve in this capacity.

The Council was told that the Advisory Committee on Public Health had made a recommendation to the Executive Committee, which in turn had approved the recommendation and passed it on to the Council, that an ad hoc committee for radiation research be appointed to work with the Commissioner of Health. This recommendation was accepted and the committee appointed.

Title Changed

The Council also accepted the recommendation of the Executive Committee that the title of the Field Secretary be changed to that of Assistant Executive Secretary.

The Council then gave further consideration to the appeal of Frederick P. Zuspan, M.D., McDowell, Kentucky. Doctor Zuspan was present and his problem was discussed for a considerable length of time, at the conclusion of which he was thanked for his appearance and for the information that he had given.

It was decided by the Council that the 1958 Annual Meeting of the House of Delegates, both Monday, September 22, and Wednesday, September 24, would be held in the Roof Garden of the Brown Hotel. It was later decided that a subscription dinner would be optional for the delegates prior to the actual calling of the meeting to order.

Resolution Considered

The Council then considered a resolution submitted by the Jefferson County Medical Society to be presented by the KSMA delegates to the AMA House of Delegates in San Francisco in June. The resolution called on the AMA to expend its best efforts in first, calling attention to the members of the medical profession and second to the public the advantages inherent in the free choice of physician system and the evils of any medical service plan which tends to exploit the patient, physician, or otherwise lower the standards of medical care. The Council accepted this resolution and authorized its delegates to present this resolution at the 1958 Annual Meeting of the AMA.

Legislative Report Made

A report on the 1958 Legislative Session was made by Doctor Baughman. He explained how the activities in the Legislature developed and the disposition of the legislative proposals in which KSMA was interested. Mr. Bobbie R. Grogan, whose title has just been changed to Assistant Executive Secretary, was highly complimented for his work in the Legislature. Attention of the Council was called to the resolution passed the last day the Legislature was in session, entitled "HR 131." The resolution authorized the Governor to appoint a commission to study, in cooperation with the Legislative Research Commission, medical service plans and report by November 15, 1959. The President was authorized to submit a list of nominees to the Governor for membership on the "Commission on Medical Service Plans."

**As authorized by the 1956 session of the House of Delegates, the Journal is presenting a digest of the minutes of the March 27 meeting of the Council of the KSMA.*



"Health Appraisal of the School Child" was the topic of the AMA exhibit sponsored by the Kentucky State Medical Association at the Kentucky Education Association meeting on April 9, 10, and 11. Seated in the left foreground is Wallace Ann Wesley, Hs. D., of the AMA's Bureau of Health Education. The exhibit illustrated the screening process children go through for school. About 265 inquiries and requests for printed material from the AMA were made at the booth.

Industrial Med. Assoc. Elects Dr. Rowntree

Gradie R. Rowntree, M.D., Louisville, was elected second vice president of the Industrial Medical Association at the 13th National Industrial Health Conference at Atlantic City, New Jersey, on April 19-25.

The Association is the national organization of physicians who are specialists in industrial medicine and surgery. It sponsors the conference together with the American Association of Industrial Nurses, the American Industrial Hygiene Association, the American Association of Industrial Dentists, and the American Conference of Governmental Industrial Hygienists. Doctor Rowntree is also chairman of the Board of Governors of the Jefferson County Medical Association.

Allergy Society Meets in May

About 30 members attended the annual spring meeting of the Ohio Valley Allergy Society at the Brown Hotel in Louisville on May 10-11.

Featured on the program were Leonard Leight, M.D., and Beverly Towery, M.D., of the University of Louisville School of Medicine. Other Kentucky physicians who participated were: A. B. Loveman, M.D.; Maurice Fliegelman, M.D.; Harry S. Andrews, M.D.; Norman K. Cohen, M.D.; Frank Simon, M.D.; and Armand Cohen, M.D. The fall meeting of the Society will be held jointly with the Mid-West Society at Ann Arbor, Michigan. The next spring meeting will be in Lexington.

Fayette County Society Holds Annual Meeting

Approximately 250 physicians from central Kentucky attended the annual dinner meeting of the Fayette County Medical Society at the Lexington Country Club on Tuesday, May 13, according to Robert Warfield, M.D., Lexington, president of the Society.

Vernon Knight, M.D., of the Vanderbilt School of Medicine, Memphis, presented the scientific portion of the program, speaking on "The Staphylococcal Problem Today."

This meeting was designated as the annual 10th Councilor District meeting of the KSMA, of which J. Farra Van Meter, M.D., Lexington, is Councilor.

Matthew C. Darnell, M.D., Lexington, secretary of the Fayette County Medical Society, was in charge of arrangements.

Dr. Teague Elected Chairman

Russell E. Teague, M.D., state commissioner of health, was elected chairman of the Ohio River Valley Water Sanitation Commission at a meeting of the group at Kenlake Hotel on April 30. He will become chairman on July 1.

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1. Weinberg, A., and Werner, W. E. F.: Am. Pract. & Digest Treat. *6*:580 (April) 1955.
2. Codling, J. W., and Lowden, R. J.: Northwest Med. *57*:331 (March) 1958.



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Dr. Ackerly Wins Fellowship

A Guggenheim Fellowship to assist in his research on the frontal-lobe function in the brain has been awarded to S. Spafford Ackerly, M.D., chairman of the psychiatry department at the University of Louisville Medical School.

Doctor Ackerly, who has been engaged in such studies as a "research hobby" for a number of years, will write and publish here by next spring a monograph based on six clinical studies. The fellowship carries a stipend of $3,600. Doctor Ackerly will not take a leave of absence, but will work on the project as time permits.

Tri-County Society Honors Dr. Risk

Dr. C. C. Risk, Shelbyville dentist, who has served as secretary-treasurer of the Shelby, Oldham, Henry County Medical Society for 17 years, was honored by the Society at a testimonial dinner at the Old Stone Inn on April 24.

The surprise party attended by members of his family, Society members, and colleagues, also marked Dr. Risk's 51st year as a practicing dentist. Last year he was honored by the Kentucky Dental Association by election to the 50-year Club for his half century of practice.

Survey Made on Rheumatic Disease

Early returns indicated a good response to a recent survey sent to all physicians in the state to determine the prevalence of rheumatic fever and rheumatic heart disease in Kentucky by the Division of Chronic Disease Control of the State Department of Health.

The survey, sponsored by the Health Department, the KSMA, and the Kentucky Heart Association, covered the year 1957. It is estimated that rheumatic fever and rheumatic heart disease account for about 300 deaths annually, but there are no records available on the prevalence of the disease.

HIF Sponsors New Study of Rates

The Health Information Foundation announced recently that it will finance a $36,000, 18-month study of "experience rating" in voluntary health insurance —the setting of charges or premiums according to varying uses of services by different groups

According to George Bugbee, Foundation president, the object of the study is to investigate the differences between fixed "community-wide" rates and experience rates, which are adjusted in terms of sex and age ratios; comparing their advantages for the public, the nonprofit plans, the insurance companies, and the providers of health services. He called it one of a number of current Foundation surveys designed to help resolve special problems in the growth of voluntary health insurance.

Medicare Announces Procedures for Handling Claims for Services Rendered by Physicians and Dentists Now Deceased

The following requirements and procedures relating to claims for services rendered by deceased dentists or physicians under the Medicare plan are furnished for the information of KSMA physicians.

In such cases DA Form 1863 should still be used, with the exception that the following certification by the physician's personal representative should be attached to the claim form in lieu of the certification in Item 29.

"I certify that the attached statement is true and correct and that payment due from the government under P. L. 569 has not been received; that said statement is for services which were rendered by Dr. _____ as the attending physician (dentist), or, as authorized by the attending physician (dentist); that he was not an intern, a resident, or otherwise in a training status at the time he rendered the care; that, except for the amount shown in Item 26, I will accept as full payment for services rendered by him and covered by P. L. 569 the amount of his usual fee shown in Item 24, or the amount finally approved by the Government, whichever is less. Services included in these charges in Item 24 which were of unusual degree involving excessive effort are explained by the attached Special Report. My acceptance of any amount from the Government for care included in this statement and authorized under P. L. 569 will preclude me from accepting any amount therefore from the patient or other source in excess of that shown in Item 24.

"In addition, evidence should be submitted to show the signatory's status as the personal representative of the physician's or dentist's estate—e. g., letters of administration, copy of court order appointing the person as executor, or other documentary evidence of the fact that the person is the personal representative of the deceased's estate.

"Evidence should also be submitted sufficient to corroborate the fact that the services described on the DA Form 1863 were actually performed. The physician or dentist could have stated from personal knowledge that he performed the services; the personal representative may not have knowledge of the fact. The corroboration should be by someone having actual knowledge that the services were performed by the named physician or dentist—e.g., a hospital administrator or other hospital personnel, a partner of the physician or dentist, an office assistant to the physician or dentist, or the patient involved.

"Checks drawn by contractors should be made payable to "The Estate of _____, Physician." Contractors operating with advance payments should forward the check to the Office for Dependents' Medical Care, Washington 25, D.C., for counter signature by the Contracting Officer. Claims of dentists should be forwarded to the Office for Dependents' Medical Care."

The documents outlined should be securely attached to the claim form and retained for record and audit purposes.

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Joint Meet in Ashland, April 17

About 80 physicians and their wives attended a joint dinner meeting of the 13th Councilor District and District Four State TB Hospital in Ashland on April 17.

KSMA President Edward B. Mersch, M.D., Covington, spoke on "Complacency" following the dinner. Other physicians on the day's program were: Glenn Bryant, M.D., Walter Coe, M.D., Louisville; Porter Mayo, M.D., Lexington; John Y. Templeton III, M.D., Philadelphia, and L. D. Urban, M.D., Ashland.

New Members Added to Roster

Six new members have been added to the KSMA roster since the last listing in the Journal. They are:

Donald Janney, M.D., Covington
Carroll A. Jansen, M.D., Fort Mitchell
Paul Klingenberg, M.D., Covington
Kenneth E. Lanter, M.D., Florence
Robert Magallon, M.D., Louisville
Raymond Timmerman, M.D., Fort Thomas

AMA Material on Aging Available

Reprints of an article describing some of the ways persons over 65 are being increasingly included in voluntary health coverage from the April, 1958 issue of the *Chronic Illness Newsletter*, and a booklet, "Suggested Guides for Medical Society Committees on Aging" are now available from the Council on Medical Service. They may be obtained by contacting the KSMA Headquarters Office, 1169 Eastern Parkway, Louisville 17, or calling GLendale 4-6324.

PUBLIC HEALTH

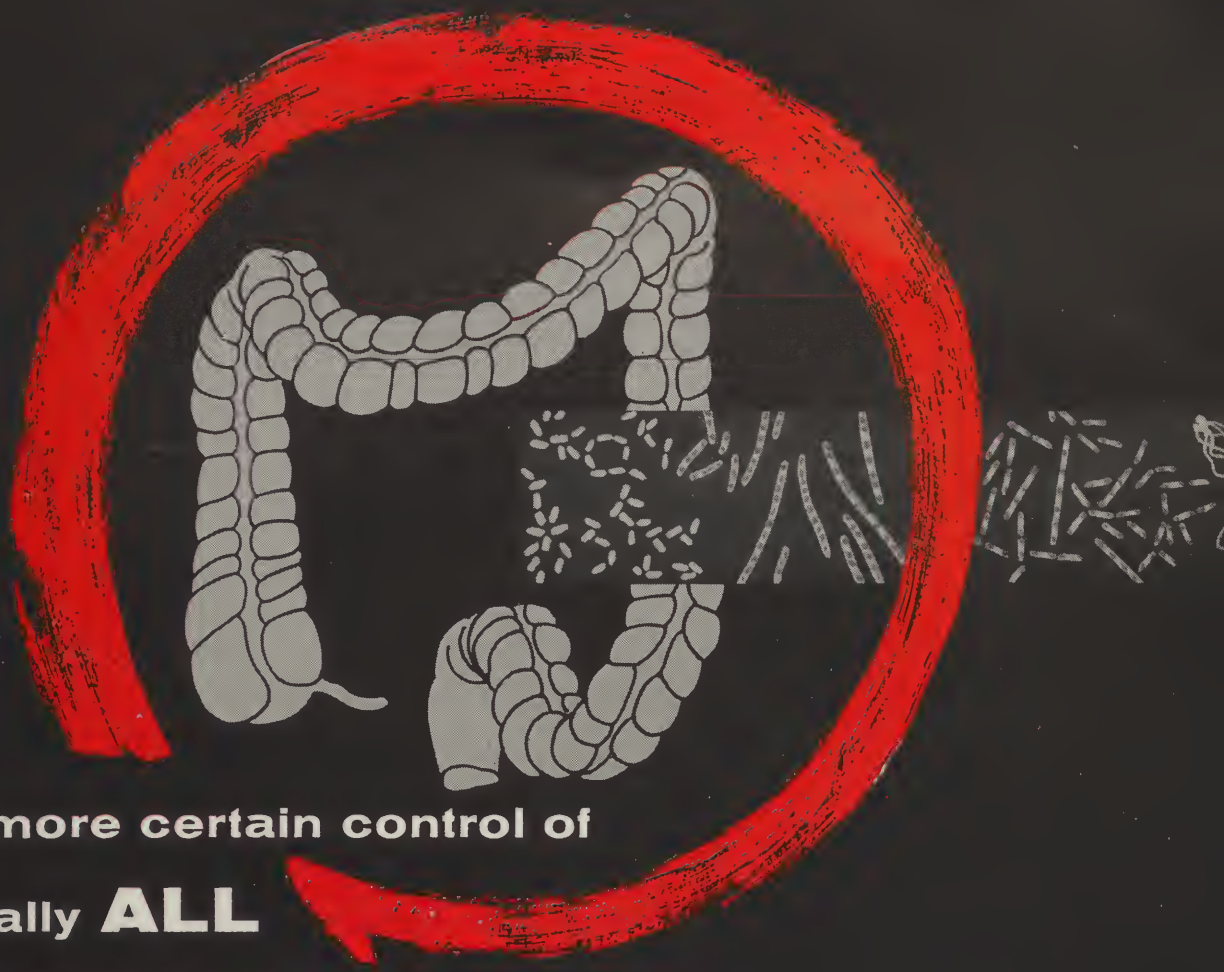
(Continued from Page 532)

fractionated so as to render the product non-infectious. No vaccine presently on the market contains human serum. However, control of transmission by blood or plasma transfusions is more difficult to devise and no method to sterilize these has been successful. Gamma globulin, even in large doses, does not protect against hepatitis B infection.

Epidemiologic and experimental data to date suggest that infection with either the A or B virus is followed by resistance to infection with the homologous virus. It is believed that the duration of immunity to the A virus may be long-lived, a belief supported by the fact that human gamma globulin from pooled plasma is highly effective in the prophylaxis of hepatitis A. Data regarding immunity to virus B infection beyond one year are not available. It has been established, however, that gamma globulin, and even convalescent serum, obtained from patients recovering from a B infection, fail to protect volunteers against the B virus.

Robert Brashear, M.D., is now associated with John Hummel, M.D., in the practice of medicine in Winchester. A native of Estill County, Doctor Brashear received his M.D. degree from the University of Louisville School of Medicine in 1954. He interned at St. Elizabeth Hospital in Dayton, Ohio, and before coming to Winchester he practiced for three years at Rockford, Ohio.





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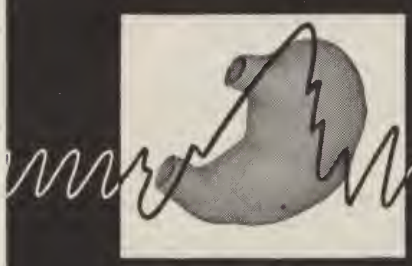
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MATERNAL MORTALITY

(Continued from Page 534)

livery or in the immediate post partum period until that above described.

Autopsy revealed rupture of the lower uterine segment on the left side. Death was therefore attributed to hemorrhage due to rupture of the lower uterine segment, left side.

Comment

This death was, of course, considered a direct obstetric one, and was, of necessity, considered preventable. The exact amount of oxytocic given was not stated, and whether it played a part in producing the lower segment rupture could not be definitely concluded. Whether unduly tumultuous first stage contractions or the rapid delivery were the responsible factors could only be conjectured.

With the advantage of hindsight, it was felt that the immediate post partum contraction of the uterus controlled bleeding from the laceration and/or a satisfactory clot formed. With subsequent relaxation, fatal hemorrhage rapidly occurred. Immediate post partum examination of the cervix and perhaps manual exploration of the uterus may have altered the course of events. In view of the suddenness of this hemorrhage and its severity, it was felt that nothing could have prevented the death after the complication manifested itself.

NEWS ITEMS

Alex J. Steigman, M.D., head of the department of pediatrics at the University of Louisville School of Medicine, delivered the fifteenth annual Bela Schick Lecture in New York City on April 7. His subject was "Poliomyelitic Properties of Some Nonpolio Viruses: The Multiple Etiology of Heine-Medin Disease."

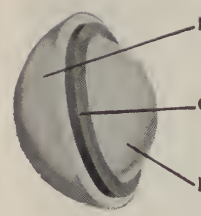
Edward C. Shrader, M.D., returns to Louisville in June in the practice of ophthalmology with Arthur H. Keeney, M.D. Doctor Shrader is a graduate of the University of Louisville School of Medicine in 1954, and interned at Louisville General Hospital. He then spent a year in basic ophthalmology at the University of Pennsylvania, Graduate School of Medicine, and is now completing his service as chief resident surgeon at the Wills Eye Hospital in Philadelphia.

W. A. Weldon, M.D., Glasgow, was recently selected "Boss of the Year" by the Glasgow Business and Professional Women's Club and was presented with the group's annual trophy award. Doctor Weldon was cited for his "humanitarian work and for his unselfish civic activity." Last year's winner was C. C. Howard, M.D., Glasgow.

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County Society Reports

McCracken

Judith Stout, M.D., health officer of Paducah and McCracken County, presented the program of the March meeting of the McCracken County Medical Society, at which Burton Haley presided. With the aid of charts and graphs she presented the program given by her department.

Discussion regarding the maternal death rate, prenatal clinic, heart clinic, and hearing and sight clinic followed Doctor Stout's presentation. During the course of the discussion two motions were passed, "1. To determine from the Kentucky State Health Commissioner, Doctor Teague, the scope and duties of the Health Department and Medical Health Directors of the Department of Health of Kentucky, 2. To have the local medical members of the County Health Board give a report of the activities and finances of the County Health Department."

Doctor Blake read the changes in the printing of the bylaws which was recently mailed to all Society members. These and the new Constitution and Bylaws were unanimously adopted.

Doctor Haley announced that the Reidland High School desired a physician to participate in Career Day at the School on April 30. This matter was left to the Publicity Committee.

It was decided that the Society would sponsor a page in the program of the production, "Needles and Splints of 1958," sponsored by the Riverside Hospital Auxiliary for the benefit of a proposed nursing school. A motion was made and passed to sponsor such a page and defray the cost of $50.

McCracken

Everett H. Sanneman, Associate Professor of Medicine at the University of Louisville Medical School, talked on blood transfusions at the monthly meeting of the McCracken County Medical Society on April 23.

Charles B. Billington, M.D., reported on the activities of the City-County Health Department. He said the budget is approximately $65,000 a year and that there are approximately 13 to 15 employees; 8 of which are nurses. A committee was appointed to study all the activities of the Paducah-McCracken Health Departments. It includes, Winfield Stryker, M.D., chairman and Doctors Billington, Harting, Priddle, Spaulding, Sullivan, and Sloan.

W. Burton Haley, M.D., president, reported that the legal department of the AMA had assured him that an Arthritis-Rheumatism Survey to be conducted by the University of Southern Illinois is acceptable.

An interim executive committee including, Doctors Hall, Turner, Johnson, Sloan, Smith, and Pace was elected to hold office until the annual election in December.

It was announced by Doctor Sloan that he attended a meeting concerning a proposed new nursing school and said that it was requested that a member of the Society attend a meeting to be held at Paducah Junior College sometime after May 12 to organize such a school.



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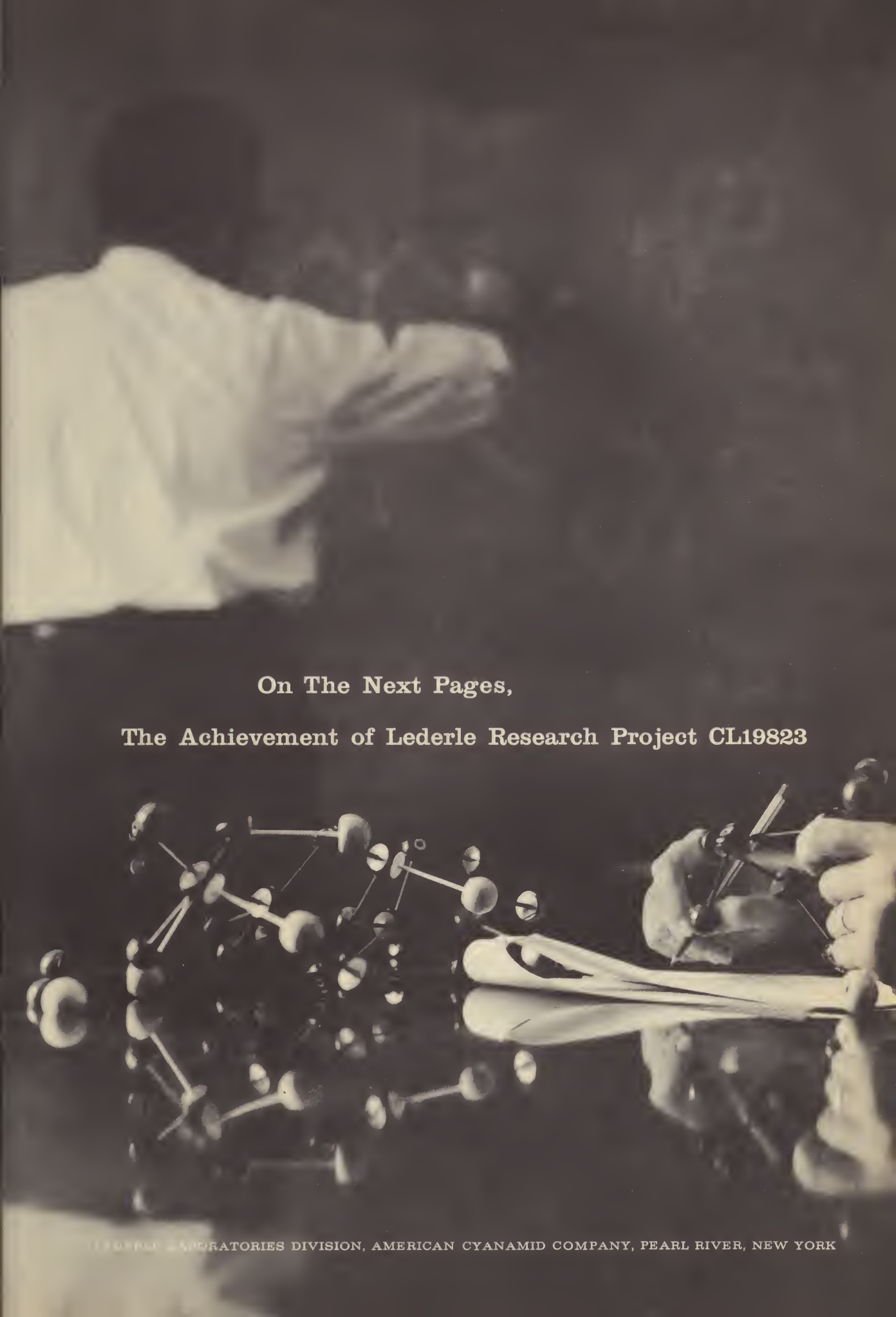
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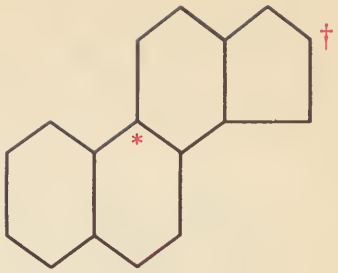
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- **a new low** in the collateral hormonal effects associated with all previous corticosteroids
  - No sodium or water retention
  - No potassium loss
  - No interference with psychic equilibrium
  - Low incidence of peptic ulcer and osteoporosis

Biological Effects of Aristocort

with particular emphasis on:

Kidney function

Animal studies on ARISTOCORT[1] have not demonstrated any interference with creatinine or urea clearance. Autopsy surveys of organs of animals on prolonged study of this medication have shown no renal damage.

Sodium and water

ARISTOCORT produced an increase of 230 per cent of water diuresis and 145 per cent sodium excretion when compared to control animals.[1] Metabolic balance studies in man revealed an average negative sodium balance of 0.8 Gm. per day throughout a 12-day period on a dosage of 30 mg. per day.[2] Additional balance studies showed actual sodium loss when ARISTOCORT was given in doses of 12 mg. daily.[3] Other investigators observed significant losses of sodium and water during balance studies and that those patients with edema from some older corticosteroids lost it when transferred to ARISTOCORT.[4,5] In two studies of various rheumatic disorders (194 cases) on prolonged treatment, sodium and water retention was not observed in a single case.[6,7]

Potassium and chlorides

There was no active excretion of potassium or chloride ions in animals given maintenance doses of ARISTOCORT 25 times that found to be clinically effective.[1] Potassium balance studies in humans[2,3] revealed that negative balance did not occur even with doses somewhat higher than those employed for prolonged therapy in rheumatoid arthritis. Hypokalemia, hyperkalemia or hypochloremia did not occur, when tested, in 194 patients with rheumatoid arthritis treated for up to ten and one-half months.[6,7]

Calcium and phosphorus

Phosphate excretion in animals[1] was not changed from normal even with amounts 25 times greater (by body weight) than those known to be clinically effective. Human metabolic balance studies[3] demonstrated that no change in calcium excretion occurred on dosages usually employed clinically when the compound is administered for its anti-inflammatory effect. Even at a dosage level twice this, slight negative balance appeared only during a short period.

Protein and nitrogen balance

Positive nitrogen balance was maintained during a human metabolic study on maintenance dosage of 12 mg. per day.[3] At dosages two to three times normal levels, positive balance was maintained except for occasional short periods in metabolic studies of several weeks' duration.[2,3]

There was always a tendency for normalization of the A/G ratio and elevation of blood albumin when ARISTOCORT was used in treating the nephrotic syndrome.[8]



Liver glycogen deposition and inflammatory processes

An intimate correlation exists between the ability of a corticosteroid to cause deposition of glycogen in the liver and its capacity to ameliorate inflammatory processes.

In animal liver glycogen studies, relative potencies of ARISTOCORT over cortisone of up to 40 to 1 have been observed. Compared to ARISTOCORT, five to 12 times the amount of prednisone is required to produce varying but equal amounts of glycogen deposition in the liver.[1]

Most patients show normal fasting blood sugars on ARISTOCORT. Diabetic patients on ARISTOCORT may require increased insulin dosage, and occasional latent diabetics may develop the overt disease.

Anti-inflammatory potency of ARISTOCORT was determined by both the asbestos pellet[1] and cottonball[9] tests. It was found to be nine to 10 times more effective than hydrocortisone in this respect.

Gastric acidity and pepsin

The precise mode of ulcerogenesis during treatment with corticosteroids is not known. There is much experimental evidence for believing this may be related to the tendency of these agents to increase gastric pepsin and acidity—and this cannot be abolished by vagotomy, anticholinergic drugs or gastric antral resection.[10] Clinical studies[11] of patients on ARISTOCORT revealed that uropepsin excretion is not elevated. Further, their basal acidity and gastric response to histamine stimulation were within normal limits.

Central nervous system

The tendency of corticosteroids to produce euphoria, nervousness, mental instability, occasional convulsions and psychosis is well known.[12] The mechanism underlying these disturbances is not well understood.

ARISTOCORT, on the contrary, does not produce a false sense of well being, insomnia or tension except in rare instances. In the treatment of 824 patients, for up to one year, not a single case of psychosis has been produced. In general, it appears to maintain psychic equilibrium without producing cerebral stimulation or depression.

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Lederle

The Promise of Aristocort in Reduction of Side Effects

It is axiomatic to affirm that the undesirable collateral hormone effects of corticosteroids increase in frequency and severity the higher the dosage and the longer used.

It has also become well recognized that the most serious of the major side effects from long-term corticosteroid treatment are peptic ulcers, osteoporosis with fracture, drug psychosis and euphoria, and sodium and water retention leading often to general tissue edema and hypertension.

It is significant that of the close to 400 patients on the lower dosage schedules found effective in bronchial asthma and dermatologic conditions, only 1 case of peptic ulceration has developed. No other of the above side effects have been observed even though ARISTOCORT was administered continuously to them for periods as long as one year.

The treatment of rheumatoid arthritis with steroids appears to result in the highest incidence of side effects. For this reason, the side effects associated with ARISTOCORT therapy in 292 patients with rheumatoid arthritis are reported below.

Peptic Ulcer

The occurrence of peptic ulcer in 292 patients with rheumatoid arthritis treated continuously for up to one year with ARISTOCORT is approximately 1 per cent (2 of the 3 occurred in patients transferred from prednisone). In the remaining 532 cases recently analyzed, only one ulcer has been discovered in a patient who apparently had no ulcer when he was changed from another steroid.

Osteoporosis and Compression Fractures

The occurrence of osteoporosis with compression fracture in 292 patients with rheumatoid arthritis treated continuously for up to one year with ARISTOCORT is 0.33 per cent (1 case[1]). Although these results are encouraging, determination of the true incidence of osteoporosis will have to await the passage of more time.

Euphoria and Psychosis

The euphoria so commonly produced by all previous corticosteroids has seemed a most desirable attribute to patients. In penalty, however, they have often later to pay for this by mental disturbances, varying from mild and transitory to severe depression and psychosis,[2] and toxic syndromes producing even convulsions and death.[3]

Since the onset of these complications is not directly related to duration of steroid administration,[4] the fact that not one case of psychosis occurred in 824 patients treated with ARISTOCORT, is most encouraging.

Sodium Retention—Hypertension—Potassium Depletion

When 17 patients were changed from prednisone to ARISTOCORT, 11 rapidly lost weight although only one had had visible edema.[5] Sodium and water retention, hypokalemia or hyperkalemia and steroid hypertension did not appear in 194 rheumatoid arthritis patients treated with ARISTOCORT.[1,6]

The interrelation between blood and body sodium, and steroid hypertension has long been generally appreciated.[7,8] Except in rare instances, or when unusually high doses are used (e.g., leukemia), the problem of edema and hypertension caused by sodium and water retention, has been eliminated with ARISTOCORT.

Minor Side Effects

Collateral hormonal effects of less serious consequence occurred with approximately the same frequency as with the older corticosteroids.[1] These include erythema, easy bruising, acne, hypertrichosis, hot flashes and vertigo. Several investigators have reported symptoms not previously described as occurring with corticosteroid therapy, e.g., headaches, lightheadedness, tiredness, sleepiness and occasional weakness.

Moon facies and buffalo humping have been seen in some patients on ARISTOCORT. However, ARISTOCORT therapy, in many instances, resulted in diminution of "Cushingoid" signs induced by prior therapy. Where this occurs, it may be related to reduced dosage on which patients can be maintained.

Reduction of dosage by one-third to one-half

In a double-blind study of comparative dosage in patients with rheumatoid arthritis,[9] 70 per cent of the cases were as well controlled on a dose of ARISTOCORT one-half that of prednisone. A general recommendation can be made that ARISTOCORT be used in doses two-thirds that of prednisone or prednisolone in the treatment of rheumatoid arthritis. There are individual variations, however, and each patient should be carefully titrated to produce the desired amount of disease suppression.

Comparative studies, of patients changed from prednisone, indicate reduced dosage of ARISTOCORT in bronchial asthma and allergic rhinitis (33 per cent),[5] and in inflammatory and allergic skin diseases (33-50 per cent).[10,11]

General Precautions and Contraindications

Administration of ARISTOCORT has resulted in lower incidence of major serious side effects, and in fewer of the troublesome minor side effects known to occur with all previously available corticosteroids. However, since it is a highly potent glucocorticoid, with profound metabolic effects, all traditional contraindications to corticosteroid therapy should be observed.

No precautions are necessary in regard to dietary restriction of sodium or supplementation with potassium.

Since ARISTOCORT has less of the traditional side effects, the appearance of sodium and water retention, potassium depletion, or steroid hypertension cannot be used as signs of overdosage. As a rule patients will lose some weight during the first few days of treatment as a result of urinary output, but then the weight levels off.

Patients do not develop the abnormally voracious appetite common to previous corticosteroid administration. In fact, some patients experienced anorexia, and it is advisable to inform patients of this and to recommend they maintain a normal intake of food, with emphasis on liberal protein intake.

While precipitation of diabetes, peptic ulcer, osteoporosis, and psychosis can be expected to appear rarely from ARISTOCORT, they must be searched for periodically in patients on long-term steroid therapy.

Traditional precautions should be observed in gradually discontinuing therapy, in meeting the increased stress of operation, injury and shock, and in the development of intercurrent infection.

There is one overriding principle to be observed in the treatment of any disease with ARISTOCORT. *The amount of the drug used should be carefully titrated to find the smallest possible dose which will suppress symptoms.*

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Lederle

The Promise of Aristocort in Rheumatoid Arthritis

ARISTOCORT *therapy has been intensely and extensively studied for periods up to one year on 292 patients with rheumatoid arthritis.*

Significant is the fact that most patients were *severe* arthritics, transferred to ARISTOCORT from other corticosteroids because satisfactory remission had not been attained, or because the seriousness of collateral hormonal effects had made discontinuance desirable.

Results of treatment

Freyberg and associates[1] treated 89 patients with rheumatoid arthritis (A. R. A. Class II or III and Stage II or III). Of these, 51 were on ARISTOCORT therapy from three to over 10 months. In all but a few patients, satisfactory suppression of rheumatoid activity was obtained with 10 mg. per day. Thirteen were controlled on 6 mg. or less a day, and for periods to 180 days. The investigators reported therapeutic effect in most cases to be A. R. A. Grade II (impressive) and that marked reduction in sedimentation rates occurred.

Another interesting observation in this study: Of the 89 patients treated, 12 had active ulcers, developed from prior steroid therapy. *In six patients, the ulcers healed while on doses of* ARISTOCORT *sufficient to control arthritic symptoms.*

Hartung[2] treated 67 cases of rheumatoid arthritis for up to 10 months. He found the optimum maintenance dose to be 11 mg. per day. Nineteen of these patients were treated for six to 10 months with an "excellent" therapeutic response.

Dosage and course of therapy

The initial dosage range recommended is 14 to 20 mg. per day—depending on the severity and acuteness of signs and symptoms. Dosage is divided into four parts and given with meals and at bedtime. Anti-rheumatic effect may be evident as early as eight hours, and full response often obtained within 24 hours. This dosage schedule should be continued for two or three days, or until all acute manifestations of the disease have subsided, whichever is later.

The maintenance level is arrived at by reduction of the total daily dosage in decrements of 2 mg. every three days. The range of maintenance therapy has been found to be from 2 mg. to 15 mg. per day—with only a very occasional patient requiring as much as 20 mg. per day. Patients requiring more than this should not be long continued on steroid therapy.

The aim of corticosteroid therapy in rheumatoid arthritis is to suppress the disease only to the stage which will enable the patient to carry out the required activities of normal living or to obtain reasonable comfort. The maintenance dose of ARISTOCORT to achieve this end is arrived at while making full use of all other established methods of controlling the disease.

ARISTOCORT is available in 2 mg. scored tablets (pink); 4 mg. scored tablets (white). Bottles of 30.

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Lederle

The Promise of Aristocort in Respiratory Allergies

About 200 patients with respiratory allergies have been treated with ARISTOCORT *for continuous periods up to eight months.*

Results of treatment

Sherwood and Cooke[1,2] gave ARISTOCORT to 42 patients with bronchial asthma and allergic rhinitis. Average dose needed to control the asthmatic group was approximately 6 mg. per day (range, 2 to 14 mg.). Results, which were called "good to excellent" in all but four, were achieved on one-third less than similarly effective doses of prednisone or prednisolone.

The investigators noted other major improvements in ARISTOCORT therapy over the older steroids. There was no increase in blood pressure in any patient: *on the contrary, in 12 patients, there was reduction of pressure when they were transferred to* ARISTOCORT. One patient had required auxiliary antihypertensive drug therapy; over a nine-week period on ARISTOCORT, the pressure gradually fell from 206/100 to 136/79. In another case, the pressure slowly dropped from 205/105 to 154/86.

The number of cases in which these investigators tried ARISTOCORT in allergic rhinitis was not large enough to provide significant averages. However, the range of effective therapy was from 2 to 6 mg. per day. These strikingly low daily doses resulted in control of all signs and symptoms.

Schwartz[3] treated 30 patients with chronic, intractable bronchial asthma. At an average daily dose of 7 mg., he reported "good to excellent" results in all but one. Spies,[4] Barach[5] and Segal,[6] reported similar results at average daily maintenance doses of 4 to 10 mg. of ARISTOCORT.

Dosage and course of therapy

The initial dosage range recommended is 8 to 14 mg. of ARISTOCORT daily. Although a rare, very severe case may require more than this on the first day of therapy, these dosages will usually result in prompt alleviation of dyspnea, wheezing and cyanosis. Patients are soon able to carry out a normal span of daily activity.

The maintenance level is arrived at by reduction of the total daily dose every three days in decrements of 2 mg.; in the over-all series, the average daily dose for bronchial asthma is approximately 8 to 10 mg. and for allergic rhinitis, 2 to 6 mg. per day. All total daily doses should be divided into four parts and given with meals and at bedtime. As in every condition where corticosteroids are employed, each patient's treatment should be individualized and the maintenance arrived at by careful titration against signs and symptoms of disease.

Patients with chronic bronchial asthma may require steroid therapy for several months. And since asthma may be associated with cardiac disease, especially in the older age groups, ARISTOCORT is particularly useful because of its ability to cause excretion of sodium and water.

ARISTOCORT is available in 2 mg. scored tablets (pink); 4 mg. scored tablets (white). Bottles of 30.

Bibliography

1. Sherwood, H., and Cooke, R. A.: J. Allergy 28:97, 1957. 2. Sherwood, H., and Cooke, R. A.: Personal Communication. 3. Schwartz, E.: Personal Communication. 4. Spies, T. D.: Personal Communication. 5. Barach, A. L.: Personal Communication. 6. Segal, M. S.: Personal Communication.

Lederle

The Promise of Aristocort

in Nephrotic Syndrome

◊ *Fourteen patients with the nephrotic syndrome have been treated with* ARISTOCORT *for continuous periods of up to six weeks.*

Results of treatment

Hellman and associates[1,2] noted that ARISTOCORT, because of its favorable electrolyte effects, may well be the most desirable steroid to date in treatment of the nephrotic syndrome. However, thus far its use has been reported in only 14 children, of whom 8 had a complete diuresis and disappearance of all abnormal chemical findings. Four of the patients had diuresis, but continued to show some abnormal chemical findings, while two patients with signs of chronic renal disease failed to respond.

Dosage and course of therapy

In order to produce maximal response, 20 mg. should be given daily until diuresis occurs. The dose should then be decreased gradually and maintained around 10 mg. a day. After the patient has been in remission for some time, it may be advisable to diminish the dose gradually and discontinue ARISTOCORT.

in Pulmonary Emphysema and Fibrosis

◊ *Eleven patients with pulmonary emphysema and/or fibrosis were treated with* ARISTOCORT *for continuous periods of over two months.*

Results of treatment

Only small series of cases observed by Barach,[3] Segal,[4] and Cooke,[5] are available. Barach treated patients who were not adequately controlled by prednisone, with the same dose of ARISTOCORT with significant improvement.

Dosage and course of therapy

The initial suppressive dose range recommended is 10-14 mg. daily. Frequently, there is a prompt decrease in cyanosis and dyspnea, with increase in vital capacity.

The average maintenance dose level was 8 mg. a day. If it is desired to maintain a patient on continuous therapy for some months, dosages as low as 2 mg. a day have been successful. All decreases in dosage should be gradual and at a rate of 2 mg. decrements in total daily amount, every two to four days. The daily dosage is divided into four parts and given with meals and at bedtime.



in Neoplastic Diseases

◊ *Forty-four children and adults have been given* ARISTOCORT *for palliative treatment of acute leukemia, chronic lymphatic leukemia, lymphosarcoma, lympholeukosarcoma and Hodgkin's disease.*

Results of treatment

Farber[6] has treated 22 children with acute leukemia for an average of three weeks. Of the 17 observed long enough to judge the efficacy of the medication, he rated five as excellent, three as good, two as fair and seven as poor responses.

Hellman and associates[7] gave ARISTOCORT to a group of patients with the various lymphomas in doses of 40 to 50 mg. a day—occasionally up to 100 milligrams. Treatment was continued in some cases for 17 weeks. Response was classified as good for the palliative purposes for which the drug was given.

Dosage and course of therapy

Massive initial suppressive doses of 40 to 50 mg. per day in children (1 mg./kg./day) and up to 100 mg. a day in adults have been administered.

Responses to any specific dosage in these conditions vary so widely that only a general dosage range can be indicated. Treatment must be individualized; rate of reduction in dosage and determination of maintenance levels cannot be categorized.

Miscellaneous

Patients with various other diseases have been treated by several clinical investigators. These include patients with osteoarthritis, acute bursitis, rheumatic fever, spondylitis, other "collagen-vascular" diseases (dermatomyositis, etc.), thrombocytopenic purpura, chronic eosinophilia, hemolytic anemia, diuretic-resistant congestive heart failures, and adrenogenital syndrome.

There have not been sufficient patients in any of the above categories to permit definitive treatment schedules to be finally established for ARISTOCORT. Additional studies are now in progress and physicians desiring information on any of these diseases are requested to write to Lederle Laboratories, Pearl River, New York for available data.

ARISTOCORT is available in 2 mg. scored tablets (pink); 4 mg. scored tablets (white). Bottles of 30.

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1. Hellman, L., Zumoff, B., Kretshmer, N., and Kramer, B.: Presented at Nephrosis Conf., Bethesda, Md., Oct. 26, 1957. 2. Ibid: Personal Communication. 3. Barach, A. L: Personal Communication. 4. Segal, M. S.: Personal Communication. 5. Cooke, R. A.: Personal Communication. 6. Farber, S.: Personal Communication. 7. Hellman, L., Diamond, H. D., Ellison, R., Jaslowitz, B., Murphy, M. L., Tan, C. and Zumoff, B.: Personal Communication.

Lederle

The Promise of Aristocort

in Inflammatory and Allergic Skin Diseases

◊ *Over 200 patients with allergic and inflammatory skin diseases (including psoriasis, atopic dermatitis, exfoliative dermatitis, pemphigus, dermatitis herpetiformis, eczematoid dermatitis, contact dermatitis and angioneurotic edema) have been treated continuously with* ARISTOCORT *for periods of up to eight months.*

Results of treatment

Rein and associates[1] treated 26 patients with severe dermatitis. Twenty-four had been on prednisone when changed to ARISTOCORT. While some had found satisfactory symptomatic relief, others had also developed side effects—moon face, buffalo hump, increased appetite with excessive weight increases and gastro-intestinal disturbances.

These investigators determined the equivalent dosage of ARISTOCORT to be approximately two-thirds that required to control symptoms on the previous corticosteroid. Thirteen of the 26, who had developed moon face, noted either an actual decrease or no further increase when transferred to ARISTOCORT. In addition: *Voracious appetites disappeared, with loss of weight in 11 patients; there was no elevation in blood pressure, and no necessity to restrict sodium or administer supplemental potassium.* Sherwood and Cooke,[2] and Shelley and Pillsbury[3] obtained similar results in allied disorders.

Hollander[4] first observed that ARISTOCORT appears to have striking affinity for the skin and great activity in controlling such diseases as psoriasis, for which other corticosteroids have been indifferently effective. Shelley and Pillsbury,[3] in 50 cases of acute extending psoriasis found that over 60 per cent were markedly improved.

Dosage and course of therapy

The recommended initial suppressive dose range is 14 to 20 mg. per day. In very severe cases, temporary dosages up to 32 mg. a day have been successfully employed. Once lesions are suppressed, gradually reduce dose to the maintenance level—which may be as low as 2 mg. per day.

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in Disseminated Lupus Erythematosus

◊ *Forty patients with disseminated lupus erythematosus were treated with* ARISTOCORT *for continuous periods of up to nine months.*

Results of treatment

Patients have responded very promisingly to therapy. Dubois[1] has had the largest single experience (28 cases) with ARISTOCORT in the treatment of this disease. He reported 25 of the 28 responded favorably.

Freyberg,[2] Hartung,[3] Hollander,[4] Spies,[5] and Segal,[6] each in smaller series of cases, reported similarly good therapeutic responses.

Dosage and course of therapy

The initial suppressive dose recommended is 20-30 mg. daily. Once the desired effect is achieved, the dose should be reduced gradually to maintenance levels (3 to 18 mg. per day).

In severely ill patients large doses may be required for several days in order to preserve life. Even on these large doses, edema and sodium retention have not occurred.

ARISTOCORT is available in 2 mg. scored tablets (pink); 4 mg. scored tablets (white). Bottles of 30.

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W. J. BASS, M.D.
Paducah
1869 - 1958

W. J. Bass, M.D., who had practiced in Paducah for 59 years, died in Paducah on April 22. He had retired from active practice in 1950, because of ill health, and at that time had served the city longer than any other general practitioner.

He had served as City physician and was elected McCracken County coroner for several terms. His service with the City spanned 47 years. Doctor Bass graduated from the old Louisville Medical College in 1892.

CHARLES WILLIAM DeWEESE, M.D.
Livermore
1879 - 1958

Charles William DeWeese, M.D., who had practiced medicine in Livermore since 1925, died while in his office on May 16.

The 79-year-old physician was a Spanish-American War veteran and a 1906 graduate of the Hospital College of Medicine in Louisville.

EARLE C. WALTER, M.D.
Mayfield
1895 - 1958

Earle C. Walter, M.D., a physician and surgeon in Mayfield for 37 years, died at Mayfield Hospital after a long illness on May 13. He came to Mayfield in 1921 as a member of the original staff of Mayfield Hospital.

Doctor Walter graduated from the Vanderbilt University School of Medicine in 1919. He was well known as a leading breeder, trainer, and exhibitor of saddle horses, as well as a horse show judge. In 1948, he was instrumental in the establishment of the Purchase District Fair in Mayfield and donated 44 acres of ground as a fairgrounds and park.

NEWS ITEMS

E. R. Earle, M.D., has opened an office in Nicholasville for the general practice of medicine. A native Kentuckian and a graduate of the University of Louisville School of Medicine in 1902, he came to Nicholasville from Urbana, Ohio, where he had practiced for 25 years. Following his graduation from medical school, he practiced in Paducah for about 8 years.

Paul Parks, M.D., a graduate of the University of Louisville School of Medicine in 1948, has started practicing internal medicine in Bowling Green. He interned at General Hospital in Louisville and has practiced in Richmond, Ky., Georgia, and Florida, before coming to Bowling Green.

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(1) Hagedorn, A. B.: Proc. Staff Meet. Mayo Clin. 32:705 (Dec. 11) 1957.
(2) Best, W. R.; Louis, J., and Limarzi, L. R.: M. Clin. North America (Jan.) 1958, p. 3.

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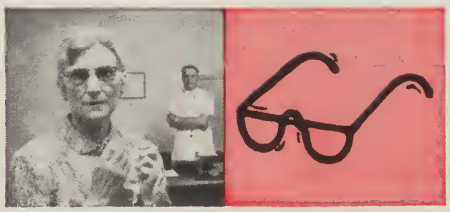
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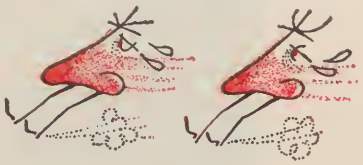
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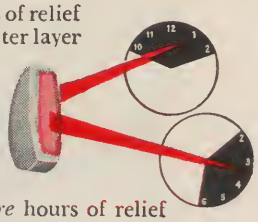
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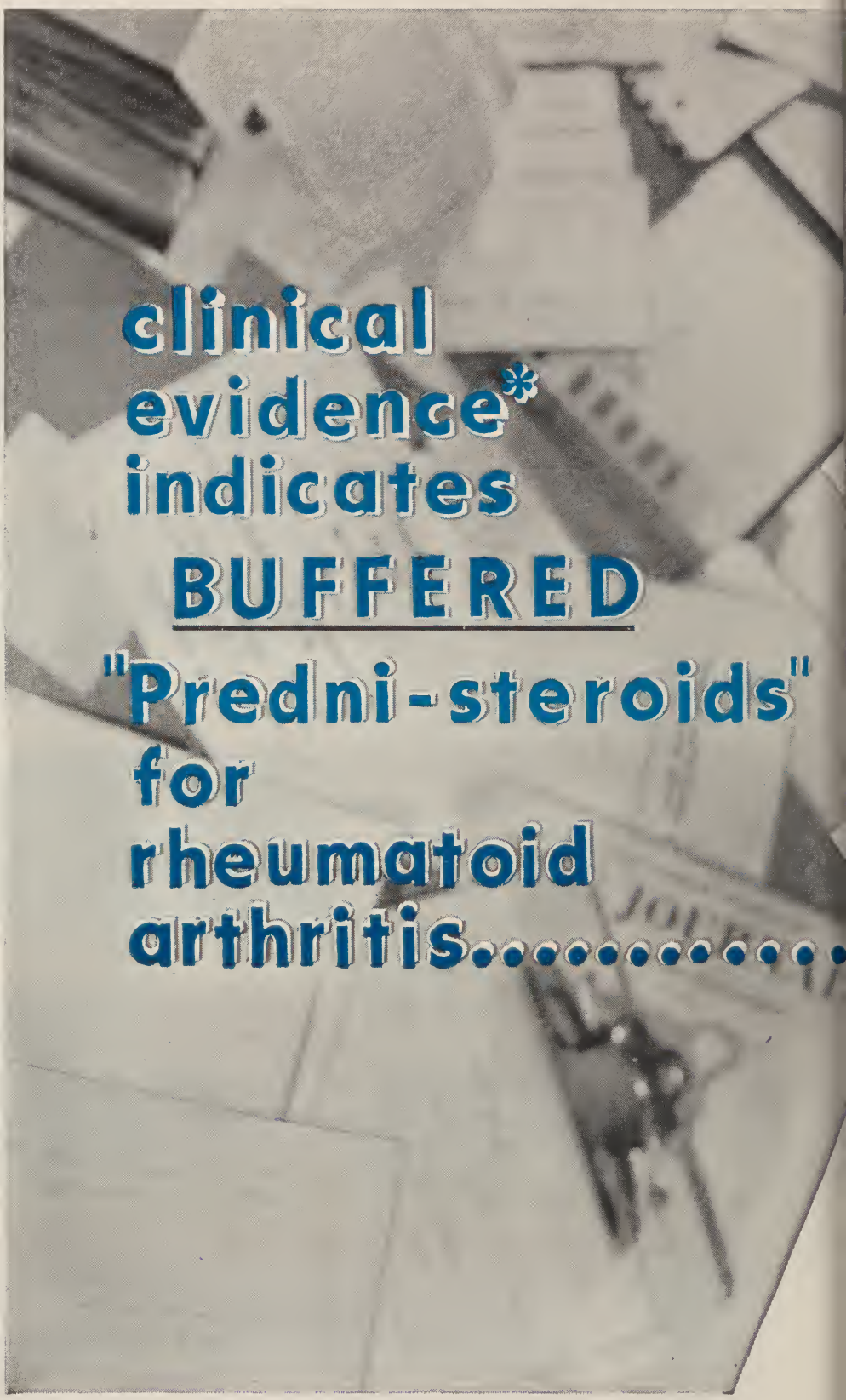
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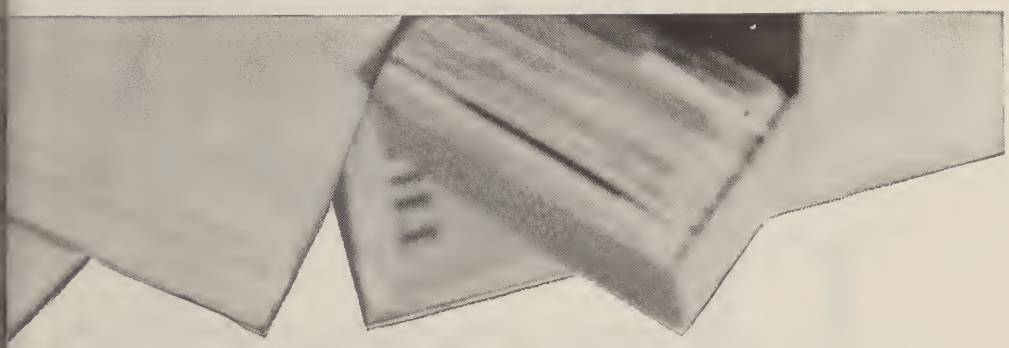
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State J. Med. 57:2049 (June
57.

*"It is our growing conviction that all patients receiving oral steroids should take each dose after food or with adequate buffering with aluminum or magnesium hydroxide preparations."—Sigler, J. W. and Ensign, D. C.: J. Kentucky State M. A. 54:771 (Sept.) 1956.

*"The apparent high incidence of this serious [gastric] side effect in patients receiving prednisone or prednisolone suggests the advisability of routine co-administration of an aluminum hydroxide gel."—Bollet, A. J. and Bunim, J. J.: J. A. M. A. 158:459 (June 11) 1955.

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References: 1. Grieble, H. C. and Jackson, G. G.: Prolonged Treatment of Urinary-Tract Infections with Sulfamethoxypyridazine. *New England J. Med.* 258:1-7, 1958. 2. Editorial *New England J. Med.* 258:48-49, 1958. 3. Jones, W. F., Jr. and Finland, M., Sulfamethoxypyridazine and Sulfachloropyridazine. *Ann. New York Acad. Sc.* 60:473-483, 1957.

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FORD, R. V., Rochelle, J.B.III, Handley, C. A., Moyer, J. H. and Spurr, C. L.: J.A.M.A. **166**:129, Jan. 11, 1958.

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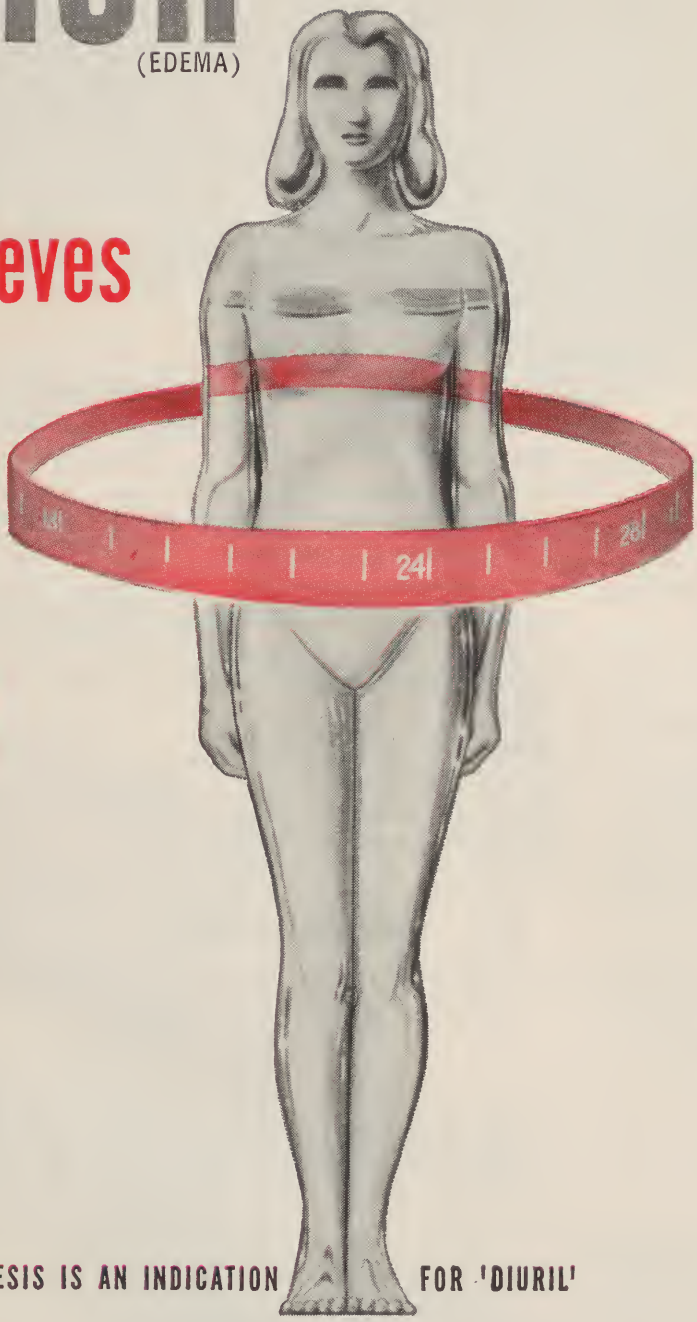
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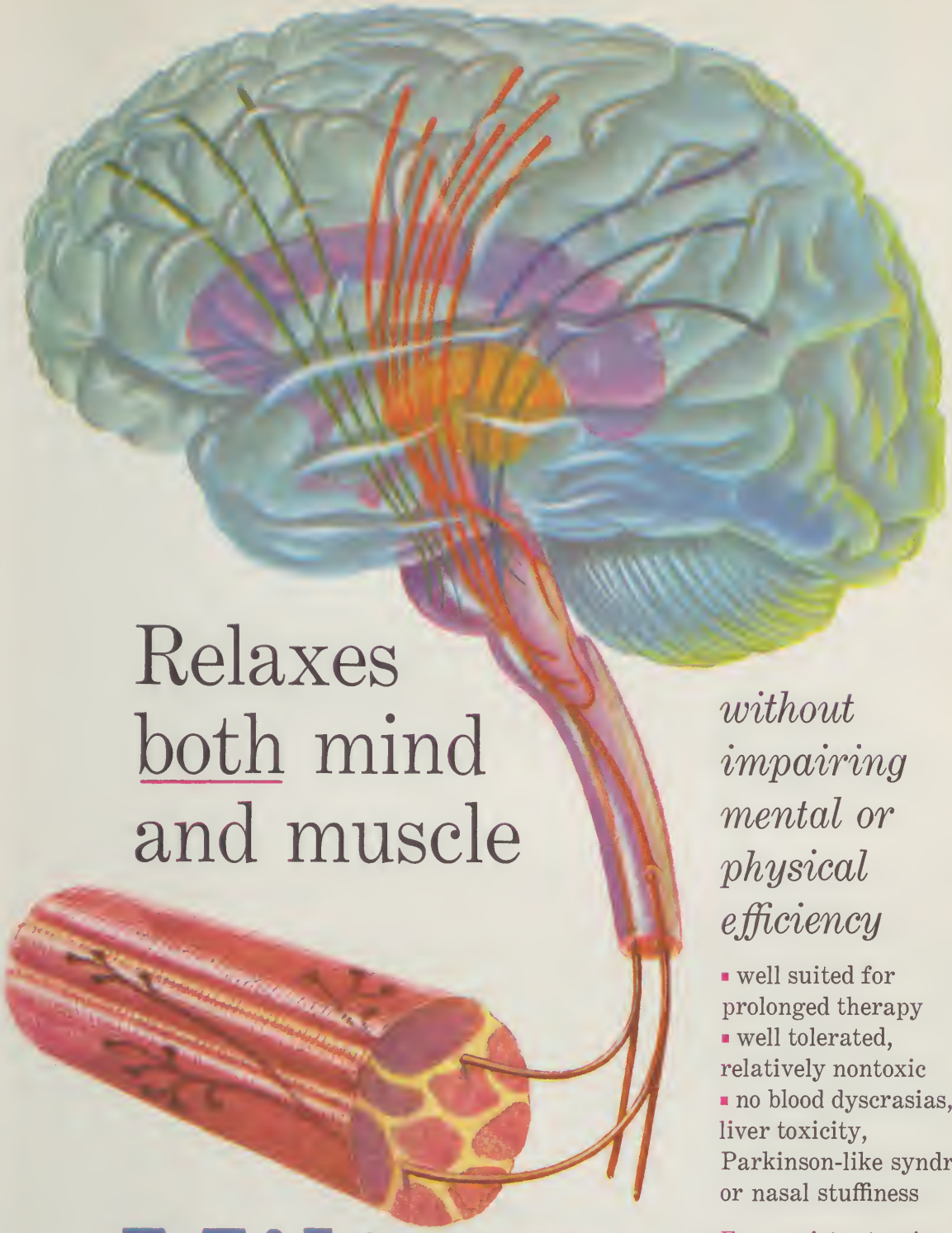
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*Ford, R.V., and Moyer, J.H.: Rauwolfia Toxicity in the Treatment of Hypertension, Postgrad. Med. *23*:41 (Jan.) 1958.

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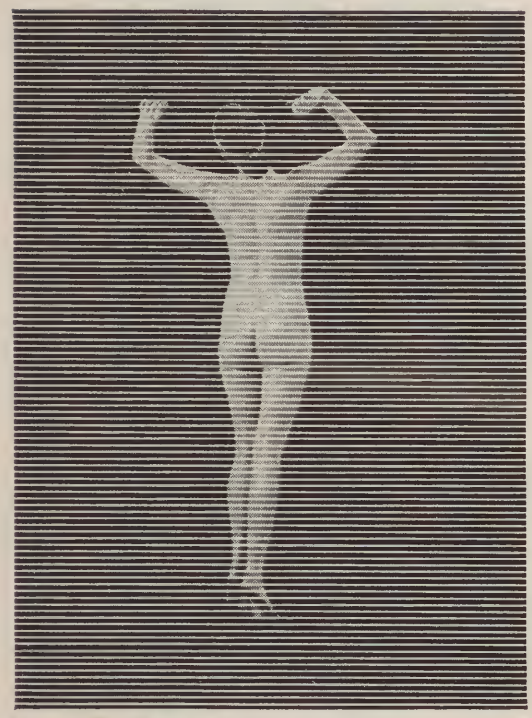
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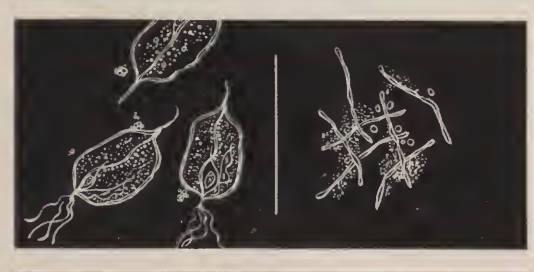
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message from the President

LET US REMEMBER

July 4, 1776 is the most memorable day in the history of these United States of America. For on that day the representatives of the United States in congress assembled declared the independence of this land of ours.

On the evening of the 4th of July, 1776, the document prepared and written by Thomas Jefferson, and known as the Declaration of Independence, was adopted by vote thus giving birth to the newly founded nation.

This was a true expression of the will of the people. And the people were cognizant of the gravity of their action. They realized the responsibility inherent in the act. They realized they would have to fight a war. They realized there would be much suffering and privation. But they realized also that political freedom and self government were to be their reward.

For this they did fight, and won for America the right to life, liberty, the pursuit of happiness, and the right to be governed according to our Constitution.

The succeeding generations of Americans have loved and fought for this land of ours. They have been ever mindful of the greatest of documents in the world of governments. Our fallen dead have consecrated this land to God for a continuation of freedom. We must not forget this. We must continue to keep America for Americans. We must not allow ourselves to be drawn into world citizenship. We must reject the internationalism with its attendant socialism.

We must continue to revere Our Flag and teach our children to love and honor Our Flag and Our Country.

Yes, July 4th is a day for asserting our determination to remain Americans. It is time that we display Our Flag and salute it with the words:

"I pledge allegiance to the flag of the United States of America and to the Republic for which it stands, one Nation, under God, indivisible, with liberty and justice for all."

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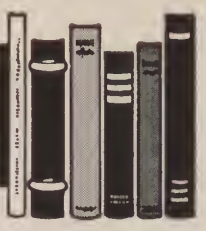
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IN THE BOOKS



Books Received

Following is a list of books received by the Association for review. Those considered of particular interest to Journal readers will be reviewed as space permits. All complimentary copies of books received are turned over to the University of Louisville-Jefferson County Medical Society Library. Inquiries concerning a particular book should be made to the KSMA Headquarters Office, 1169 Eastern Parkway, Louisville 17, Ky.

DIETARY PREVENTION AND TREATMENT OF HEART DISEASE: by John W. Griffin, M.D., Alex V. Nichols, Ph.D., and E. Virginia Dobbin, senior dietician; published by G. P. Putnams Sons, New York City.

DIAGNOSTIC MEDICAL PARASITOLOGY: by Edward K. Markell, Ph.D., M.D., and Marietta Voge, M.A., Ph.D.; published by W. B. Saunders Company, Philadelphia and London.

MEMOIRS OF A GP: by Otis Marshall, M.D., published by the Vantage Press, New York.

A PRIMER ON COMMON FUNCTIONAL DISORDERS: by Jack W. Fleming, M.D.; published by Little, Brown and Company, Boston.

THE STORY OF PEPTIC ULCER: by Richard D. Tonkin, M.D., F. R. C. P., published by W. B. Saunders Company, London and Philadelphia, September 30, 1957, 71 pages, price, $2.25.

"The Story Of Peptic Ulcer" is labelled by its author as "Dawn For Depressed and Disappointed Dyspeptics." Written by Richard D. Tonkin, M.D., F.R.C.P., of Westminster Hospital, London, England, and published by W. B. Saunders Company, it is a booklet which can be read quickly and later referred to at one's leisure.

Dr. Tonkin's story is a combination of delightful reading and of sound medical advice for the ulcer patient. With a rare sense of wit and wisdom, Dr. Tonkin, with the assistance of his capable illustrator, Raymond Hellier, F.R.S.A., has created an unusual book for the lay public.

Through sketches, diagrams and a few statistical charts, the reader is introduced to a brief and simplified lesson in anatomy and physiology of the stomach and intestines. The nature and possible causes of ulcer (gastric and duodenal) are explained. The problem of acid is introduced and an explanation given for the necessity of regular meals and between-meal feedings.

The occupational incidence of peptic ulcer in various jobs and professions provided an interesting chapter. The emotions, family predispositions and individual susceptibility—all these subjects are briefly discussed.

In the second part of the book, the author gives suggestions for "outwitting the villain" by four simple expedients: 1) suitable food at regular intervals, 2) reasonable rest and a calm demeanor, 3) plenty of patience in the early stages, and 4) genuine interest in final success.

The author expresses hope that the readers (the ulcer patients) would be amused and interested, and, as a consequence, would succeed in coming to terms with their irritating ailment and be able to accept and manage it.

Arthur M. Schoen, M.D.

DIABETES AS A WAY OF LIFE: T. S. Danowski, M.D., published by Coward-McCann, Inc., New York, Feb. 21, 1958; 167 pages, 14 figures; price $3.50.

This book is intended as a guide for the diabetic. However it is not for the beginner, but to give ready access to the diabetic who desires to understand more fully the facts about his condition.

The author discusses the signs and symptoms of good and poor control, diet, insulin, quackery, cures, acidosis and coma, insulin shock, complications, special problems, infections, surgery, social aspects, diabetes in children, diabetes in pregnancy, living with diabetes and attitudes. In general he tries to show the diabetic just what he has, what is best for successful control, and how to make an intelligent acceptance of diabetes as a way of life.

A patient who will avail himself of all the facts presented, will feel more secure in his own ability, and can cooperate more intelligently and effectively with his physician. It will help him in understanding what to expect, and what the future holds for him.

The book presents a good brief review for the busy practitioner. It is too small to be elaborate, and at times is sketchy.

There is a check list of questions and answers, some of which are repetitious, but are more for emphasis.

In the back of the book is a glossary which should be quite helpful to the layman.

The appendix gives some detailed instructions for urine sugar tests, describes the action of the various types of insulin, and the role of the pituitary, thyroid and adrenal glands in diabetes. Also it has a roster of lay diabetes societies.

The language is direct, reads easily, and uses a minimum of technical terms to present a great amount of material which is quite technical for the lay person.

Carlisle Morse, M.D.



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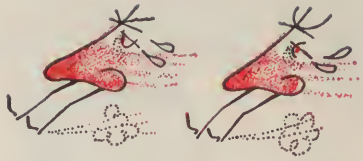
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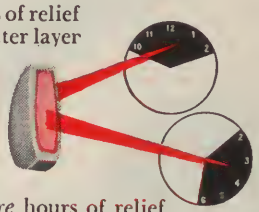
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BURROUGHS WELLCOME & CO. (U.S.A.) INC., Tuckahoe, N. Y.

PUBLIC HEALTH PAGE

Whose Responsibility Is Venereal Disease Control?

RUSSELL E. TEAGUE, M.D.
Commissioner of Health, Commonwealth of Kentucky

Since there is no effective immunization against venereal diseases, the only alternative we have in controlling these diseases is to find and treat the infected persons. Finding such individuals is primarily the responsibility of public health workers. The diagnosis and treatment of them is the responsibility of the practicing physician.

The picture has changed completely since the time when large venereal disease clinics were conducted in practically every county in the state where large numbers of venereally infected persons received free diagnostic and treatment services. This change has been due primarily to the development of effective, simplified, and less costly treatment procedures in addition to a sustained intensive venereal disease control program. Since penicillin was proven to be effective in the treatment of both syphilis and gonorrhea, we have witnessed a dramatic decline in the number of cases placed under treatment.

Since 1948, the number of reported cases of syphilis decreased steadily throughout the nation from a high of 338,141 to a low of 122,075. However, we must avoid the error of assuming that our vigilance can be lessened. In 1956, an increase of 4,100 cases was noted. National figures for 1957 are not yet available, but in Kentucky we observed an increase of 11% over the previous year. Most alarming to us is Kentucky's 41% increase in the number of cases of infectious syphilis during the first five months of 1958 over the corresponding period in 1957. The Public Health Service has analyzed data reflecting new morbidity, admissions to mental institutions of patients with psychoses due to syphilis, mortality due to syphilis, and results of selective blood-testing programs. These analyses have shown that there are substantial numbers of persons throughout the nation with syphilis who have not yet been diagnosed and Kentucky has its proportionate share. There are many more who have had adequate diagnosis and started treatment but never completed it, and many more who have not had proper follow-up after supposed adequate treatment.

The problem then is obvious. Its solution requires the joint effort of the private physician and the public health worker. In increasing numbers private physicians who have seen few or no cases of syphilis in recent years are experiencing difficulty in the management of the patient who presents a reactive serologic test for syphilis and who gives no overt history of lesions or clinical symptoms. Because the transfer of the venereal disease clinic to the office of the private physician has been a recent occurrence, very little has appeared in the literature of the private physician in recent years on this subject.

Changes in diagnostic and treatment methods have been reported for the most part in public health publications which the private physician seldom has an opportunity to read, because of the many other demands on his time. The practicing physician who has been able to keep up with developments in the field of syphilology is, for the most part, obliged to confine his efforts to treatment of the patient and has little or no opportunity to locate the source of the infection or the persons to whom the infection may have been spread. He is also handicapped when a patient removes himself from medical supervision before diagnosis or treatment has been completed.

In order to assist the physician, we in public health have certain services to offer him. Through the State Department of Health there is available at no charge the consultative service of a qualified venereal disease clinician. Through his local health department, the physician may obtain assistance from a public health representative in returning patients to him for completion of diagnosis or treatment. These public health representatives have received special training, following graduation from college, in the special techniques which are necessary in the handling of known or potential venereal disease patients. These representatives understand thoroughly the confidentiality with which venereal disease information must be regarded. They work directly under the supervision of the private physician and under no circumstances do they contact a patient without the express approval of his physician. They are equipped to extract from an infected person intimate information regarding his contacts without embarrassment to the patient.

Now, through the employment of proven treatment and epidemiologic procedures, the incidence of venereal disease has been substantially reduced. The tools are available, through the combined efforts of the private physician and the public health worker, to place, eventually, these diseases in a position of historical interest only.

Now *1* Rx

for
2-dimensional
menopausal
therapy



manages both the psychic and somatic symptoms

relieves emotional stress in the menopause

and *treats* somatic disturbances due to ovarian decline

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*TRADE-MARK

MILTOWN® A PROVEN TRANQUILIZER + CONJUGATED ESTROGENS (EQUINE) A PROVEN ESTROGEN

SUPPLIED: Bottles of 60 tablets.

EACH TABLET CONTAINS: Miltown® (meprobamate, Wallace) .....400 mg.
2-methyl-2-n-propyl-1,3-propanediol dicarbamate

Conjugated Estrogens (equine) .....0.4 mg.

DOSAGE: One tablet t.i.d. in 21-day courses with one week rest periods. Should be adjusted to individual requirements.

Literature and samples on request.

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Faster rehabilitation i

Joint inflammation and muscle spasm are the two elements most responsible for disability in rheumatic-arthritic disorders—and MEPROLONE is the one agent that treats both.

MEPROLONE suppresses the inflammatory process and simultaneously relieves aching and stiffness caused by muscle spasm, to provide greater therapeutic benefits and a shorter rehabilitation period than any single antirheumatic-antiarthritic agent.

MEPROLONE-2 is indicated in cases of severe involvement, yet often leads to a reduction of steroid dosage because of its muscle-relaxant action. When involvement is only moderately severe or mild, MEPROLONE-1 may be indicated.

SUPPLIED: Multiple Compressed Tablets in three formulas: MEPROLONE-2—2.0 mg. prednisolone, 200 mg. meprobamate and 200 mg. dried aluminum hydroxide gel (bottles of 100). MEPROLONE-1 supplies 1.0 mg. prednisolone in the same formula as MEPROLONE-2 (bottles of 100). MEPROLONE-5—5.0 mg. prednisolone, 400 mg. meprobamate and 200 mg. dried aluminum hydroxide gel (bottles of 30).

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Because muscles move joints, both muscle spasm and joint inflammation must be considered in treating the rheumatic-arthritic patient . . .



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MEPROBAMATE-PREDNISOLONE THERAPY



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MEPROLONE is the one antirheumatic-antiarthritic that exerts a simultaneous action to relax muscles in spasm and to suppress joint inflammation . . .

c

Therefore, MEPROLONE does more than any single agent to help the physician shorten the time between disability and employability.



PROLONE is a trade-mark of Merck & Co., Inc.

From the Files of the

Committee for the Study of Maternal Mortality

CASE NO. 4: A 30-year-old white gravida 2, para 1, was seen initially in her second month of pregnancy September 10, 1956. She had ten prenatal visits. Her total weight gain was given as 30 1/2 lb, but as for the amount of weight gained at each visit, as well as her blood pressure, this was not stated. By menses the patient was due to deliver April 27, 1957. Her first pregnancy was normal. On April 2 patient was seen at home with chills, fever and pyuria. She was noted to also have some edema at this time. She was treated for a urinary tract infection and responded well.

On April 23 her blood pressure was recorded as 150/100 having been previously recorded just as normal. No mention was made of edema, albumin, the condition of the cervix or treatment. The patient was given an appointment for one week. She didn't keep this but did call and say she was feeling fine.

She entered labor spontaneously on April 30. On admission to the hospital she was nearing the end of the first stage of labor. Her blood pressure was 170/100, she had 4+ albumin. She was given 2 cc of 50% $MgSO_4$ i.m. every 4 hours when admitted. Her membranes were ruptured artificially at 4 fingers dilatation. She had received 100 mg Demerol at midnight and she delivered spontaneously under ether anesthesia a 7 lb, 13 oz male about 3 hours after admission to the hospital at 4:04 A.M., 5-1-57.

At 8:00 A.M., 5-1-57 the patient had a convulsion. A catheter was inserted in the bladder, only a small amount of concentrated urine was obtained, this showed 4+ albumin. She remained anuric after this. Ten per cent G/W was given i.v. plus veratrum veride 1cc in 500 cc i.v. G/W on the advice of the consultant. Following the convulsion the patient seemed to improve, but then became worse. In the final stages rapid deterioration was noted. Her blood pressure rose to 240/120 and she became cyanotic, had Cheyne Stokes respiration and presented the clinical picture of massive intracranial hemorrhage. An airway was inserted and oxygen was given, but the patient expired at 4:30 or 5:00 P.M., May 1, 1957. There was no autopsy.

Comment

Again having all of the advantages of hindsight, the committee felt there were preventable factors present in this case. In retrospect, treatment for the preeclampsia should have been started the 23rd of April when she had a recorded prenatal blood pressure of 150/100. Usually eliminating sodium, oral diuretics, and hypotensive medication will control a multipare till induction can be safely carried out if the condition requires it. There was no mention of any attempt at this which certainly should have been considered.

If she showed no improvement on ambulatory treatment she should have been hospitalized. The hospital treatment could have been more intensive. 10 cc of a 25% or 4 cc of a 50% solution of $MgSO_4$ can be given after each convulsion or until a total of 30 cc has been given. In addition to this one of the hypotensive drugs as unitensin should have been given preferably i.v. to help lower the blood pressure. Ether for the delivery was good and the consultant's advice was excellent, it was just obtained too late.

**This is the third of a series of discussions which will appear monthly on a trial basis.*



If
Monilial overgrowth
is a factor

Achrostatin* V

TETRACYCLINE (PHOSPHATE-BUFFERED) AND NYSTATIN

Combines ACHROMYCIN V with NYSTATIN

SUPPLIED:

CAPSULES contain 250 mg. tetracycline HCl equivalent (phosphate-buffered) and 250,000 units Nystatin. ORAL SUSPENSION (cherry-mint flavored) Each 5 cc. teaspoonful contains 125 mg. tetracycline HCl equivalent (phosphate-buffered) and 125,000 units Nystatin.

DOSAGE:

Basic oral dosage (6-7 mg. per lb. body weight per day) in the average adult is 4 capsules or 8 tsp. of ACHROSTATIN V per day, equivalent to 1 Gm. of ACHROMYCIN V.

ACHROSTATIN V combines ACHROMYCIN† V ... the new rapid-acting oral form of ACHROMYCIN† Tetracycline ... noted for its outstanding effectiveness against more than 50 different infections ... and NYSTATIN ... the antifungal specific. ACHROSTATIN V provides particularly effective therapy for those patients prone to monilial overgrowth during a protracted course of antibiotic treatment.

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WASHINGTON NEWS DIGEST

Washington, D. C.—After five months of almost no action whatever on health-medical bills, Congress turned toward them late in the session, with the result that quite a number may be passed before the expected mid-August adjournment.

Most important, the House Ways and Means Committee held two weeks of hearings on the Forand bill and other social security issues. The Forand bill is a highly controversial piece of legislation that first came before Congress in another form six years ago but on which no action has been taken. The bill, strongly opposed by the American Medical Association and most other professional groups, would offer up to 120 days a year of hospital-nursing home care plus surgical services to social security beneficiaries.

Critics of the Forand bill list among their principal objections that the age line couldn't be held once the program were set up, and that the result eventually would be total national compulsory health insurance.

There was no indication from the committee whether it really was serious about the Forand bill or was admitting testimony on it merely because there was no easy way to stop such testimony once it was decided to open up the social security program. There was evidence that the committee probably would give priority to increases in public assistance payments, in view of the unusually large numbers of unemployed.

There was also an unexpected flare-up over Medicare, the military dependent medical care program that has been in effect for 18 months. Here the House Appropriations Committee, acting on mis-information, decided it would save tax money by cutting down on funds for the civilian phase of Medicare, thereby forcing more dependents to use military hospitals, which already care for about 60% of them.

However, before the money bill passed the House, proponents of the cut were convinced that they might have gone too far. They agreed to adopt in conference any reasonable amendments that might be worked out with the Senate.

American Medical Association, American Hospital Association and other professional groups carried on the fight to save Medicare.

Late in the session, Senate committee decided to approve FHA-type mortgage insurance for proprietary nursing homes. This proposal had been supported by the American Medical Association. Speaking for the Association, Dr. R. B. Robins told the Senators that most of the aged population needs a certain amount of skilled nursing and medical care, but not necessarily expensive hospital care. He said that if more and better nursing homes were built, one of the major problems of the aged population would be solved.

Congress also indicated it would enact a number of other health bills, including the following:

- A three-year extension of the Hill-Burton hospital construction program, with an amendment to allow loans in place of grants to institutions that objected to direct government aid for religious reasons.
- Salary increases for medical personnel in Veterans Administration and general pay raises for the military, which would benefit doctors in uniform.
- Authorization for grants totaling $1 million a year to the nation's schools of public health; this was amended to rule out use of the money for ordinary operating expenses.
- A public works program, under which communities would be eligible for grants to build schools, hospitals, nursing homes and other facilities.

Notes

Congressmen frequently sound out voter sentiment through the well-used poll method. A recent one by Rep. Harold Collier (R., Ill.), who comes from Chicago, turned up some interesting views on the question of whether the social security system should be used to finance medical care to all those under the program. Opposed were 73%, favoring were 26%, and only 1% had no opinion. On the question of expanding mandatory social security, the response was 47% yes, 48% no and 5% no opinion.

* * *

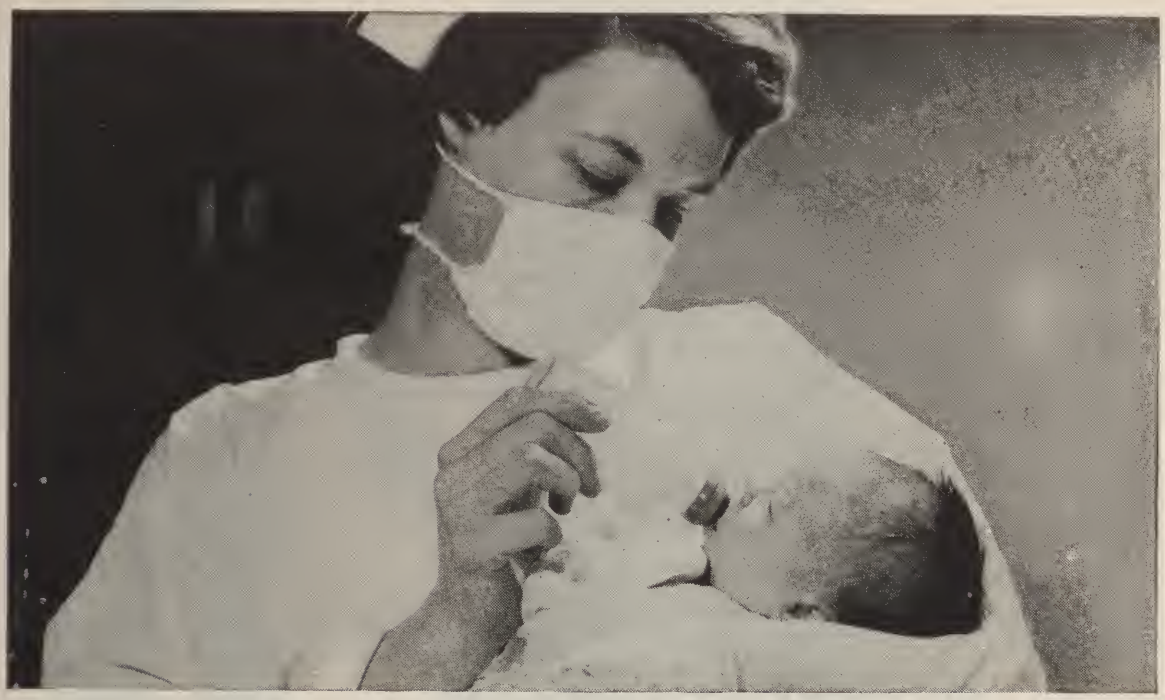
The National Health Survey has found in a preliminary study that 25 million persons in the country were injured badly enough in the second half of 1957 to require medical attention or to limit their activities for at least a day. Home accidents led the cause of injuries, 40.3%; work accidents, 16.7%; motor accidents, 9.8% and others (including violence), 33.1%.

* * *

The AMA has gone to bat for the post of Assistant Secretary of Defense for health and medical affairs. Under proposals of the administration and Congress, the job would be downgraded to that of special assistant. Dr. F. J. L. Blasingame, AMA general manager, told Congress the best interests of the military, the medical services and the country would be served by continuing the post.

* * *

Rep. Thomas Jenkins (R., Ohio), who is planning to retire from Congress, has been praised by Senator Bricker for his important contribution in the field of legislation for the self-employed. He is the author of a bill to permit physicians and others to defer income tax payment on funds paid into annuity plans.



Hospital practice of infant feeding

Standard formulas for FEEDING REGULATION

Underfeeding is a common cause when infants fail to gain and thrive. In the earliest stage, when caloric intake is inadequate, the infant cries after feeding, remains constipated, and the restlessness from hunger is mistaken for colic. A changed or weakened formula appears to be indicated.

But clinical studies show that a young infant requires a formula of 2 ounces of whole milk (40 calories), a teaspoon of Karo Syrup (15 calories), and a half-ounce of added water *per pound of body weight per day*. Of the total calories, a successful formula yields about 15-20% in protein, 50-60% in carbohydrate, and 25-35% in fat. Whole milk must be reinforced by adding 5% to 10% carbohydrate (1) to provide protein-sparing effect which permits protein anabolism instead of energy production; (2) sufficient calories for tissue formation; (3) proper utilization of fat; (4) suitable acid-base relationships in the intestinal tract and (5) adequate weight gains.

WHOLE MILK FORMULAS

Age Months	Whole Milk Fluid Oz.	Water Oz.	Karo Syrup Tbsp.	Each Feeding Oz.	Number of Feedings in 24 Hours	Total Calories
Birth	10	10	2	3	6	320
1	12	13	3	4	6	532
2	15	13	3	4½	6	480
3	17	9	3	5	5	520
4	20	11	3½	6	5	610
5	23	11	4	6½	5	700
6	26	10	4	7	5	760

EVAPORATED MILK FORMULAS

Age Months	Evaporated Milk Fluid Oz.	Water Oz.	Karo Syrup Tbsp.	Each Feeding Oz.	Number of Feedings in 24 Hours	Total Calories
Birth	6	12	2	3	6	380
1	8	16	3	4	6	532
2	9	14	3	4½	5	576
3	10	15	3½	5	5	650
4	12	18	4	6	5	768
5	12	21	4	6½	5	768
6	13	22	4	7	5	812

ADVANTAGES OF KARO® SYRUP IN INFANT FEEDING

Composition: Karo Syrup is a superior dextrin-maltose-dextrose mixture because the dextrins are non-fermentable and the maltose is rapidly transformed into dextrose which requires no digestion.



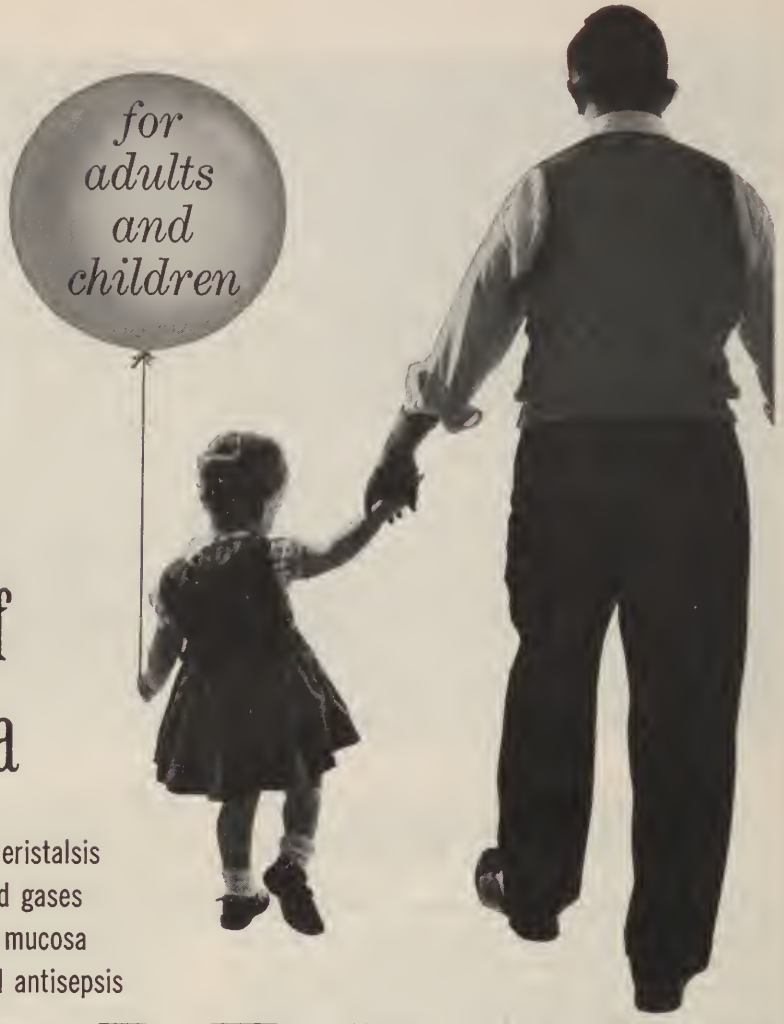
Concentration: Volume for volume Karo Syrup furnishes twice as many calories as similar milk modifiers in powdered form.

Purity: Karo Syrup is processed at sterilizing temperatures, sealed for complete hygienic protection and devoid of pathogenic organisms.

Low Cost: Karo Syrup costs 1/5 as much as expensive milk modifiers and is available at all food stores.

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- Curbs excessive peristalsis
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EFFECTIVE ANTIDIARRHEAL

FORMULA: *Each 15 cc. (tablespoon) contains:*

Sulfaguanidine	2 Gm.
Pectin	225 mg.
Kaolin	3 Gm.
Opium tincture	0.08 cc.
(equivalent to 2 cc. paregoric)	

DOSAGE: **Adults:** Initially 1 or 2 tablespoons from four to six times daily, or 1 or 2 teaspoons after each loose bowel movement; reduce dosage as diarrhea subsides.

Children: ½ teaspoon (=2.5 cc.) per 15 lb. of body weight every four hours day and night until stools are reduced to five daily, then every eight hours for three days.

SUPPLIED: *Bottles of 16 fl. oz.*

Exempt Narcotic. Available on Prescription Only.

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Meta Cine represents a carefully designed formula which provides the physician with a vaginal douche preparation which safely and effectively maintains a clean healthy vagina.

Meta Cine is a combination of several ingredients clinically established as valuable in promoting proper vaginal hygiene. Diluted for use, Meta Cine possesses the desired pH (3.5); contains the mucus digestant, papain, which dissolves mucus plugs and coagulum; contains lactose to promote growth of desirable döderlein bacilli, and methyl salicylate for soothing stimulation of circulation within the vaginal walls.

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Meta Cine is promoted exclusively to the medical profession, and recommends itself as your preparation of choice for patients who might otherwise indulge in unsupervised self-medication with potentially damaging nonphysiologic douches.

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Printed douching instructions for patients available upon request.



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(CHLOROTHIA

FORD, R. V., Rochelle, J.B.III, Handley, C. A., Moyer, J. H. and Spurr, C. L.: J.A.M.A. **166**:129, Jan. 11, 1958.

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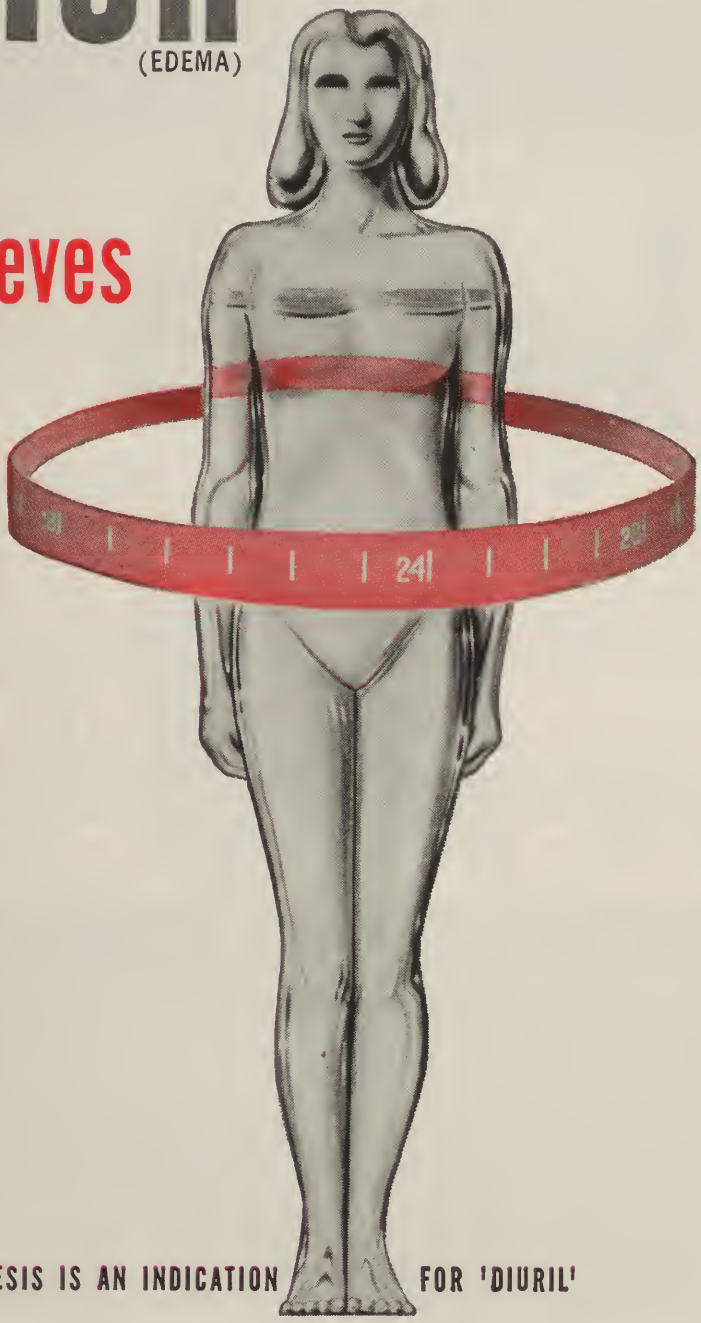
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double duty RAUDIXIN

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Raudixin "relieves anxiety and tension, particularly the tension headache of the mild hypertensive patient, better than any other drug."*

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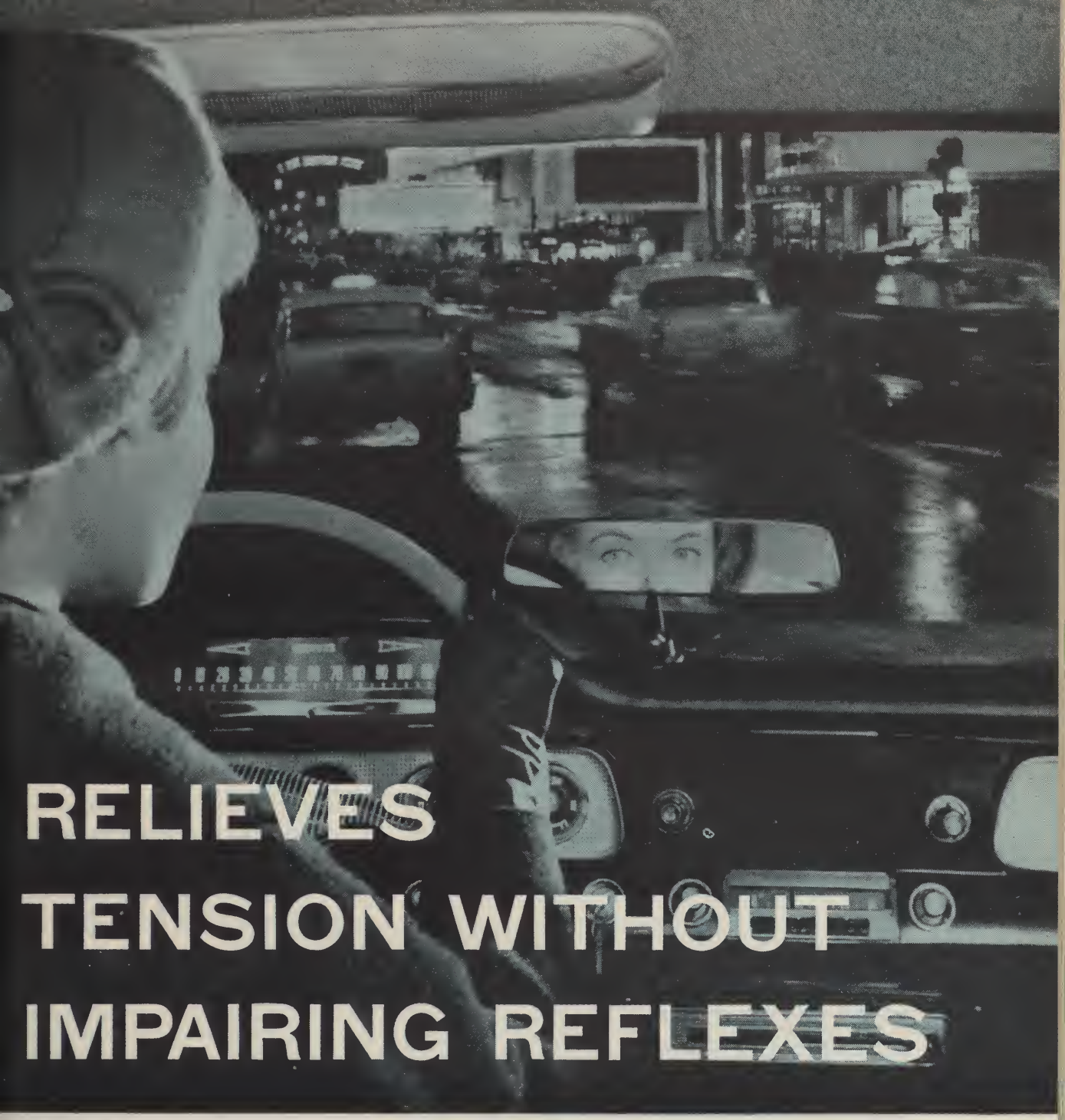
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*Finnerty, F. A. Jr.: New York State J. Med. 57:2957 (Sept. 15) 1957.

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Relieves anxiety, tension and muscle spasm in everyday practice

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*Marquis, D. G., Kelly, E. L., Miller, J. G., Gerard, R. W. and Rapoport, A.: Ann. New York Acad. Sc. 67: 701, May 9, 1957.

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Reference: 1. J.A.M.A. 158:386 (June 4) 1955.

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New "demi" strength permits dosage flexibility to meet each patient's specific needs. PERCODAN-DEMI provides the PERCODAN formula with one-half the amount of salts of dihydrohydroxycodeinone and homatropine.

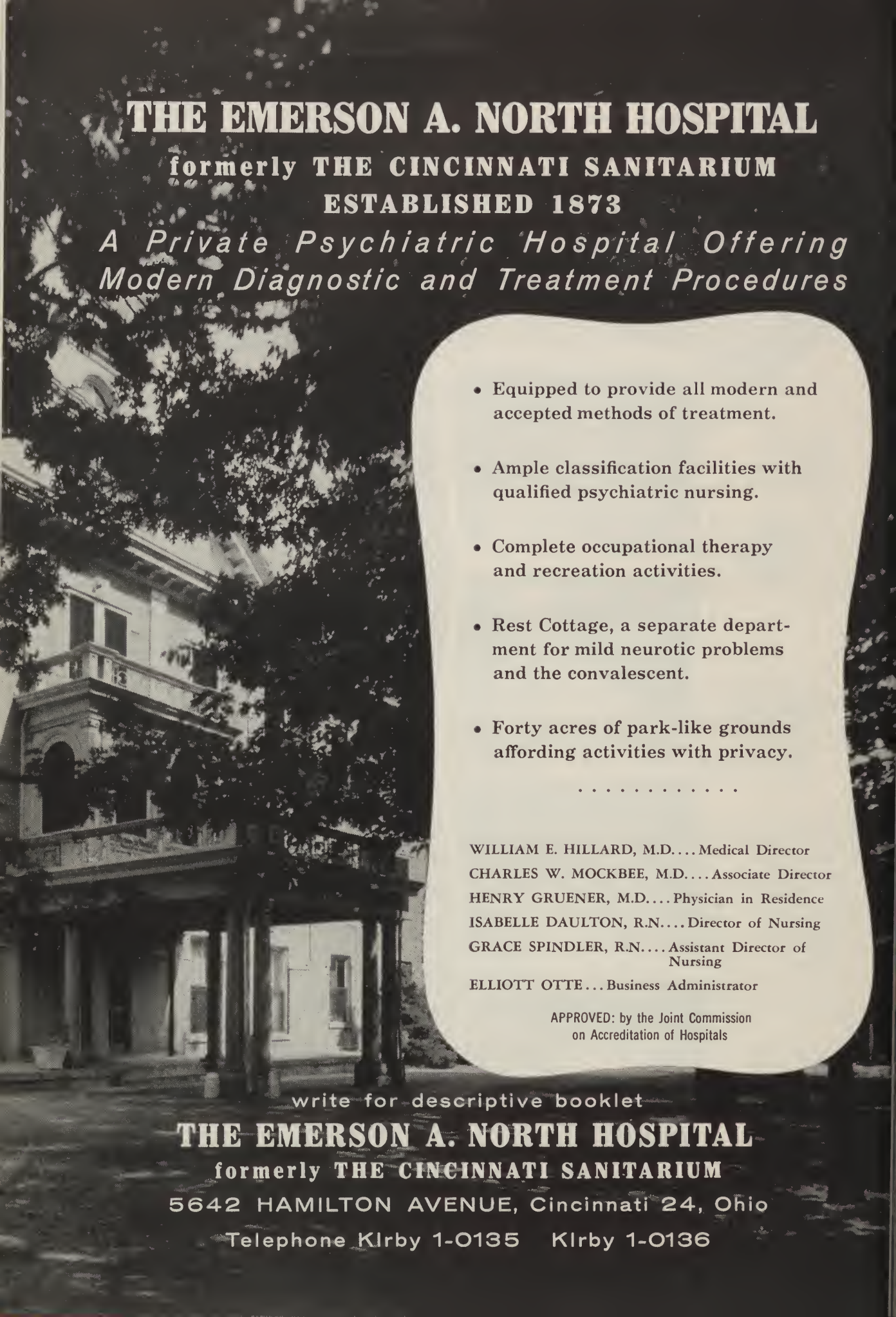
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Literature? Write

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Riseman, J. E. F., Altman, G. E., and Koretsky, S.: Nitroglycerin and Other Nitrites in the Treatment of Angina Pectoris. Circulation (Jan.) 1958.

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The Clinical Significance of Esophageal Hiatal Hernia*

JOHN H. WILLARD, M.D., F.A.C.P.,** and BURGIN E. DOSSETT, M.D.***
Harlan, Ky.

ESOPHAGEAL hiatal hernia is a frequently occurring abnormality which is capable of producing a variety of symptoms and signs often suggesting other disorders. The symptoms may be mild or disabling. The purpose of this presentation is to re-emphasize the rather high incidence of this finding during careful x-ray studies of the upper gastrointestinal tract and to evaluate its clinical importance in a group of patients seen during the course of a year at the Harlan Memorial Hospital.

RESULTS OF STUDY

Incidence

A review of 638 consecutive upper gastrointestinal x-ray studies revealed 51 instances of hiatal hernia an incidence of 7.9%. This figure is comparable to other similar studies of symptomatic patients. Hodson[1] found either esophageal regurgitation or hiatal hernia in about 5% of all upper gastrointestinal x-ray studies in adults if special procedures, such as the Valsalva maneuver, were performed. Johnson[2] indicated that hiatal hernia is the second most common abnormality found on upper gastrointestinal x-ray studies, being present in 9% of such examinations. Brick[3] arrived at a similar figure.

The actual incidence of this abnormality in the general population has not been determined. Brick and Amory[4] examined 300 ambulatory patients over 50 years of age who had no gastrointestinal symptoms and found four hiatal hernias, 1.3%. Mobley and Christensen[5] at the Mayo Clinic reported 153 cases of hiatal hernia in a city of 30,000 over a 13-year period and established the minimal prevalence rate as 5 per 1000 and the incidence rate as 0.5 and 0.8 per 1000.

The age distribution in this series as shown in Table 1 also is not unusual. In the Mobley and Christensen series, 93% were over 40 years of age with 70.5% between 50 and 80 years, as compared with 94 and 67% in our group.

TABLE 1
Age Incidence

Age	No. X-rayed	No. of Hiatal Hernias	Per cent with Hernia
0-9	9	0	0
10-19	16	0	0
20-29	62	0	0
30-39	119	6	5.0
40-49	163	7	4.3
50-59	130	13	10.0
60-69	99	12	12.0
70-79	36	9	25.0
80-89	4	2	50.0
Age not stated		2	
Totals	638	51	7.9

Table 2 gives data on the relative incidence in males and females and the occurrence of obesity in this group. It will be noted that two out of three patients with hiatal hernia in this series were males. This is a reversal of the usually reported sex incidence. In the Mobley, Christensen series, for instance, 60% of hiatal hernias were found in females. However, Brick[3] examined 3,348 patients in Boston and found 308 hiatal hernias about equally divided between the sexes. In the present series the incidence of hiatal hernia in males was 8.8% as compared with 6% in the females examined.

*Presented before the Kentucky Chapter, American College of Physicians at the KSMA Annual Meeting, September 18, 1957.

**Chief of Medicine, Harlan Memorial Hospital, Harlan, Kentucky.

***Resident in Medicine, Harlan Memorial Hospital.

TABLE II
Incidence
Total Upper Gastro-Intestinal X-rays—638

A. Sex	**X-rays**	**Hiatal Hernias**	**Per cent with Hernias**
Males	360	32	8.8
Females	279	17	6.0
B. Obesity (5 or more pounds over Metropolitan standards for height and sex)			
With hiatal hernia	33 patients	67.3 per cent of total	
Males	19 patients	59 per cent of males with hernias	
Females	14 patients	82 per cent of females with hernias	
C. Occupation			
Miners	28 patients	87.5 per cent of males with hernias	
Overweight miners	16 patients	57 per cent of miners with hernias	
Emphysema and/or pneumoconiosis	14 patients	50 per cent of miners with hernias	
Nonminer males	4 patients		
Overweight nonminers	3 patients	75 per cent nonminers	

Since one of the factors often associated with hiatal hernia and considered by many to be of etiologic importance is obesity, it is of some interest to note the proportion of patients who were over standard weight in this series. Since a workable definition of obesity is difficult to apply, it was decided to classify those patients who were five pounds or more over the Metropolitan Insurance Company standard of normal weight as being obese. Two-thirds of the patients with hiatal hernia fell into this group. It was noteworthy that 82% of the females were overweight as compared with 59% of the males. This suggests that factors other than obesity were more active in the males. One such factor might be strenuous labor since 87% of the males in this group were coal miners. Upon further analysis, it was noted that only 57% of the miners were overweight as compared with 75% of the nonminer males.

Another finding of interest was the relatively high incidence of emphysema and/or "coal miners pneumoconiosis" in the men with hiatal hernia. Fifty per cent of the miners with hiatal hernia had this evidence of chronic pulmonary disease. A review of chest x-rays of 342 males from which this group of hernias was obtained showed the incidence of emphysema and/or pneumoconiosis to be 15%. This would suggest that chronic pulmonary disease might have some etiologic significance in the development of hiatal hernia, possibly dependent upon changes in the thoracic and intra-abdominal pressures.

Symptoms

A great variety of symptoms may be present in patients found to have hiatal hernia. Considerable difficulty may be encountered in deciding which of these symptoms is dependent upon the presence of the hiatal hernia and which may be explained by other findings. Tables 3 and 4 are presented in an effort to clarify those symptoms which are most suggestive of the presence of such herniation. Since the selection of cases in this series depended upon an upper gastrointestinal x-ray study, it is not surprising that a great majority had upper gastrointestinal complaints. Chest pain and anginal symptoms were also common chief complaints. As indicated in Table 4, the most common suggestive symptom in these

TABLE III
Chief Complaints (49 patients)

Epigastric and/or upper abdominal pain	18 patients
Nausea and/or vomiting	14 patients
Chest pain	10 patients
Anginal or left chest pain	6 patients
Pyrosis and/or acid regurgitation	6 patients
Dyspnea	4 patients
Dysphagia	3 patients
Dizziness	3 patients
Dysuria	3 patients
Lower abdominal pain	2 patients
Thoracic back pain	2 patients
Right chest pain	1 patient
Left shoulder pain	1 patient
"Choking"	1 patient
Asthma	1 patient
Epigastric "jerking" (tic?)	1 patient
Diarrhea	1 patient
Constipation	1 patient
Hematuria	1 patient

TABLE IV

Complaints Referable to Hiatal Hernia (49 patients)

Pyrosis and/or regurgitation especially when lying or bending	17 patients
Precordial pain or angina pectoris	14 patients
Pyrosis after meals	13 patients
Dysphagia	9 patients
Epigastric pain	8 patients
Left shoulder pain	8 patients
Left arm pain	5 patients
Bleeding (hematemesis and/or melena	1 patient
Right shoulder and/or arm pain	1 patient
No symptoms referable to hernia	3 patients

patients was heartburn, usually occurring on bending or lying and frequently after meals. The next most common suggestive complaint was pre-cordial pain. Dysphagia, epigastric pain and left shoulder pain, sometimes referred to the left arm, were seen frequently. It is of some interest that evidence of bleeding from the hiatal hernia occurred in only one instance. In only three patients was there nothing listed in the history that might suggest the presence of hiatal hernia.

It has been suggested by previous authors that the type of hiatal hernia may be related to the severity and the nature of the symptoms. Most observers have classified hiatal hernia into three major types: (1) Esophago-gastric —those in which both the esophagus and part of the cardia of the stomach have slipped into the chest; these may be either sliding or fixed. (2) Paraesophageal hernia—those in which a portion of the stomach has slipped into the chest along the side of the terminal esophagus which remains fixed. (3) Congenitally short esophagus—those in which the normal esophago-gastric junction fails to reach the abdominal cavity during fetal development. It has been suggested that regurgitation and consequent esophagitis is seen more frequently in the esophago-gastric or short esophagus type than in the para-esophageal variety. However, painful symptoms may be more common in the latter type. The data obtained from this group do not permit any conclusions regarding the relative importance of the various types of hernia in producing symptoms. Thirty-three of the patients had small (less than 5 cm. in diameter) esophago-gastric or sliding hernias; eleven had moderate size hernias (5-10 cm. in diameter); one had a large esophago-gastric hernia (more than 10 cm. in diameter) and four had paraesophageal hernias. In some instances the small sliding hernia appeared to produce as much trouble as a larger fixed one. Two of the patients offering the most serious complaints had paraesophageal hernias. X-ray evidence of esophagitis was seen infrequently in this group.

In many instances it is difficult to distinguish between symptoms which might arise from the hiatal hernia and those due to abnormalities elsewhere in the digestive tract or in the chest. Duodenal ulcers or duodenal diverticula were associated with hiatal hernia in about a third of the patients. No gastric ulcers were demonstrated in this group. This is of some interest in view of the frequent occurrence of chronic pulmonary disease which has been thought by some observers to be a contributory factor in the development of gastric ulcer. The number having gallbladder x-rays and barium enema x-ray studies was too small to permit any conclusions.

As previously stated, the symptoms of cardiac disease are often simulated by those occurring in patients with hiatal hernia. In this group of 49 patients sixteen had chest or precordial pain as a chief complaint. More detailed studies of the histories revealed that of the entire group with hiatal hernia, fourteen had precordial pain, eight had left shoulder pain, and five had left arm pain. Evidence of myocardial damage or infarction was found by electrocardiography in five of these thirteen patients with either left shoulder or left arm pain.

Further study of cardiac abnormalities associated with hiatal hernia revealed eight patients with arrhythmia while electrocardiographic changes were found in six of thirty-three patients who had tracings recorded. Since hiatal hernia is believed capable of reflex precipitation of cardiac arrhythmias, it is of interest that only one of the patients with this finding also had electrocardiographic evidence of myocardial damage.

In spite of the frequency of complaints suggesting heart disease in these patients with hiatal hernia, there were only two who showed both clinical and electrocardiographic evidence of coronary disease with infarction.

Chester Jones,[6] in his review in 1941 of 128 patients with hiatal hernia, found that about

one-third had sub-sternal pain and many had left shoulder and left arm pain. In about one-third of those with sub-sternal pain there was an exercise relationship. He felt that differential diagnostic features included the occurrence of right shoulder pain more frequently in hiatal hernia than in heart disease. Exertion was not a constant feature in producing pain in hiatal hernia, but was quite constant in producing anginal pain and nocturnal attacks were more frequent in hiatal hernia than in coronary disease. Atropine usually was more effective in relieving the pain of hiatal hernia while nitroglycerin was more effective in relieving the pain from coronary disease. Evans[7] stated that esophageal spasms, due to efforts to control regurgitation, or esophagitis were found in 40% of patients having angina without electrocardiographic changes. A helpful point in differential diagnosis was made by Avery Jones[8] who stated that angina due to esophagitis or hiatal hernia is seldom noted on walking upstairs, since abdominal pressure is not greatly increased by this type of exertion.

Case Report

To illustrate the problems of differential diagnosis and some of the therapeutic measures which may be helpful, the following case report is presented. E. H., male, age 63, was referred to us in August, 1956, because of recurrent attacks of angina and paroxysmal tachycardia. A year prior to this visit he had been studied in another hospital because of a severe attack of precordial and retrosternal pain which was thought to be due to coronary thrombosis in spite of normal electrocardiograms. In the course of studies at that time a small hiatal hernia was demonstrated. No definite evidence of cardiac disease was found. In January 1956, after failing to improve on medical therapy, he was subjected to transthoracic repair of the hernia. The convalescence was complicated by hydro-hemo-pneumothorax requiring numerous thoracenteses. Subsequent x-rays in March, 1956, showed successful repair of the hernia but considerable scarring and fixation above the left diaphragm.

When seen here in August 1956, the patient was practically incapacitated because of frequent attacks of anginal-like pain which occurred on mild exertion, after a full meal, and often after retiring. He took from 12 to 20 tablets of nitroglycerin daily with some relief.



Fig. 1. E. H. August 1956. Para-esophageal hiatal hernia

Frequent attacks of paroxysmal tachycardia persisted. Physical examination was not noteworthy, except for the presence of fixation of the left diaphragm. The blood pressure was normal. Electrocardiograms before and during attacks of tachycardia were essentially normal. Routine laboratory examinations were normal. Gastro-intestinal x-ray studies revealed a moderate sized para-esophageal hiatal hernia. There was some deformity of the duodenal cap suggesting an old duodenal ulcer. A barium enema demonstrated numerous diverticula in the descending and pelvic portions of the colon. The upper gastrointestinal findings are demonstrated in Figure 1.

Moderate improvement following the institution of a bland diet with frequent feedings together with antispasmodic sedative medication, but one month later he began to have increasingly severe pain in the left shoulder. There was no limitation of motion and no x-ray evidence of arthritis or bursitis. Salicylates did not relieve the pain and increasing doses of opiates were required. Since it was felt that the pain in the left shoulder was related to the hiatal hernia, novocaine injection of the left phrenic nerve was advised. This procedure was followed by complete freedom of pain and much less tachycardia for several weeks. However, recurrent pain in the shoulder during the following two months did not respond well to

injections and on December 31, 1956, a left phrenic crush was performed. This was immediately successful in relieving both the angina and the left shoulder pain. However, there was increasing dysphagia. Esophageal bouginage gave only slight relief. There was epigastric and chest pressure after meals and frequent regurgitation of food.

Subsequent x-rays in Jauary 1957 showed a marked increase in the size of the hiatal hernia with some retention in the hernial pouch. These findings are demonstrated in Figures 2 and 3. The symptoms were not controlled by the medical measures and repair of the hernia was performed by William H. Potter, M.D., on January 25, 1957. The patient had a smooth convalescense and was discharged on the sixth post-operative day. Subsequent x-rays showed a satisfactory repair and gradually decreasing reaction above the left diaphragm, as demonstrated in Figure 4.

The patient has returned to his usual activities which, beside attending his office, include hunting, fishing and long trips in his car, without significant symptoms.



Fig. 2. E. H. Jan. 1957. Para-esophageal hernia with barium retention in herniated portion of stomach



Fig. 3. E. H. Jan. 1957. Lateral view of large retentive gastric pouch due to para-esophageal hernia

Treatment

In general most of the patients in this series had relatively mild symptoms and signs attributable to the hiatal hernia. A medical program usually was successful in controlling the symptoms. The regimen consisted of a bland diet, sedation and often antispasmodics. Antacids were helpful in many patients. In some, an oral topical anesthetic preparation (Probutylin, Rorer) was useful. Weight reduction, with consequent decrease in intra-abdominal pressure, is considered extremely important in the long term management of these patients. Night symptoms often can be controlled by elevation of the head of the bed or by having the patient sleep in a semi-reclining posture. Avoidance of severe exercise, such as lifting, pushing or reaching is important.

Six of the 49 patients in this group have not received entirely satisfactory relief by medical measures. Two of these have definite evidence of coronary heart disease and it is believed their symptoms are more dependent upon this condition than upon the presence of the hernia but this is difficult to determine definitely. Only two of the patients in this series have been operated upon during the period of study. Three had previous operations; two of these continue

to have some symptoms which are fairly well controlled by medical means and the third responded well to a second operation as reported above.



Fig. 4. E. H. March 1957. Successful operative repair of para-esophageal hernia

DISCUSSION

Prior to about 30 years ago there was some doubt as to whether "esophageal orifice hernia" really existed.[9] It was thought that most cases represented a congenitally short esophagus. Akerlund[10] first described a sliding hiatal hernia in 1926. Since that time the concept of hiatal hernia gradually has been accepted. Congenitally short esophagus occurs very rarely. Recent surgical experience indicates that usually the short esophagus is secondary to the herniation and is not the causative factor.

The pathogenesis of hiatal hernia has been the subject of numerous publications. The function of the terminal esophagus and other factors have been well summarized in a recent paper by Fleischner.[11] From a radiologic standpoint, the transition from a normal physiologic sliding effect of the mucosa of the terminal esophagus to a sliding hiatal hernia may be difficult to determine. The width of the esophageal hiatus has a controlling influence and varies greatly in normal individuals. Harrington,[12] many years ago, found that in 1000 consecutive laparotomies the hiatal rim surrounded the esophagus tightly in 55%, admitted one finger in 35% and two fingers in 10% of these patients. In general the size of the hiatus increases with age. Another factor in controlling the resistance of the hiatus to herniation is the phreno-esophageal ligament which probably also relaxes with age and as a result of prolonged increased stress. A third factor of great importance in the development of hiatal hernia is the presence of increased intra-abdominal pressure. This may occur under many circumstances, including obesity, ascites, large intra-abdominal tumor, pregnancy, tight abdominal support, body casts, vomiting, coughing and hard physical labor.

The symptoms produced by hiatal hernia may be dependent upon several different mechanisms. They might be classified as follows: 1. Those due to reflux of gastric juice resulting in peptic esophagitis or peptic ulceration. These include epigastric or substernal burning pain, acid regurgitation, especially on bending, lifting or lying; dysphagia, pain referred to the neck, jaw or arm. 2. Those due to diaphragmatic irritation with pain referred about the attachments of the diaphragm or reflexly through the phrenic nerve to the base of the neck, jaw, shoulder tips or arm. 3. Reflex cardiac effects consisting of anginal pain, arrhythmias, and electrocardiographic abnormalities. Vago-vagal reflexes arising from the esophagus can produce tachycardia, ventricular extra systoles, prolonged AV conduction and variable PR intervals, depression of T waves and heart block. Cardiac standstill occurred in one patient of Morrison and Swalm during balloon distention of the terminal esophagus. 4. Secondary complications include obstruction or ulceration and hemorrhage or perforation of the esophagus or gastric pouch. Intrathoracic pressure effects may also occur secondary to large hernias.

Chester Jones,[6] who has studied this problem for many years, believes that most of the pain reference is dependent upon a viscerocutaneous reflex as proposed by Mackenzie in 1893. It has been shown that section of the first six thoracic nerve posterior roots abolishes typical angina. Stimulation of the esophagus is also referred to the first six thoracic segments. Stimulation of these upper thoracic nerves is referred to the ulnar aspects of the arms. These are the segments supplying sensory nerve fibers to the esophagus and to the heart. Stimulation

of the tendinous diaphragm produces impulses over the phrenic nerve with skin reference to the third, fourth and fifth cervical segments supplying the shoulder tip and radial aspects of the arms. Stimulation of the margins of the diaphragm refers pain to the dermatome supplying the seventh to twelfth thoracic segments and often into the abdomen. From available evidence, it appears that both mechanisms may give rise to cardiac symptoms, the vago-vagal reflex influencing cardiac rhythm and possibly coronary flow while pain which is difficult to interpret may be produced by viscero-cutaneous reflexes.[13]

Summary

Fifty-one patients with esophageal hiatal hernia were found in a study of 638 consecutive upper gastrointestinal x-ray examinations. Records permitted collection of data on 49 of these. The overall incidence of hiatal hernia was 7.9% which is comparable to other reported series. The relative incidence in males was slightly higher than in females which differs from other reported series. Obesity is a common finding in patients with hiatal hernia and occurred in 67% of this group; however, only 59% of the males with hiatal hernia were overweight as compared with 82% of the females. Since eighty-seven percent of these males were coal miners, other factors possibly pre-disposing to hiatal hernia in this group include hard physical labor and chronic pulmonary disease.

The chief complaints which brought the patients to the hospital for study could be related to the presence of the hernia in about 50% of this group. In about 1/3 of the patients the presenting complaint suggested possible heart disease. Some complaints suggesting the possibility of hiatal hernia were listed in all but three patients.

Definite evidence of heart disease (electrocardiographic changes and/or heart failure) appeared in five patients; four other patients had arrhythmias without other signs of myocardial damage. The importance of the hiatal hernia in contributing to the symptoms in those patients with associated heart disease is often difficult to ascertain. In those patients with arrhythmias without other signs of myocardial damage, it is likely that the hiatal hernia was a factor of etiologic importance.

Conclusion

1. Esophageal hiatal hernia occurs with sufficient frequency to require consideration of its possible presence in many patients with digestive symptoms, chest pain or angina.

2. Etiologic factors include probable congenital variation in the size of the hiatus; weakening of the hiatal supports, especially with age; increased intra-abdominal pressure from many causes, including obesity, tumor, ascites, pregnancy, coughing, vomiting and abdominal straining with physical exertion.

3. Many symptoms may be present in persons with hiatal hernia which are not necessarily dependent upon the hernia. In the present group of 49 patients it was felt that about 50% had chief complaints probably due to the hernia. Although the chief complaint in sixteen patients suggested heart disease, only five had definite signs of myocardial damage.

4. Medical therapy usually is successful in controlling symptoms of uncomplicated hernias. Surgical procedures may be required for complications such as esophagitis, ulcer, hemorrhage, stricture or uncontrollable pain.

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Some "Ups and Downs" and Achievements In Five Years As A Mental Hospital Administrator *

Ott B. McAtee, M.D., F.A.P.A.
Madison, Indiana

WHEN I was invited to accept the Superintendency of the Madison State Hospital in June, 1952, there were 365 employees, few with training for their jobs, and only five employees with college degrees. Three of the latter were physicians. The 1640 patients were about 45 per cent overcrowded. Only seven graduate nurses were employed. The plant was over 40 years old, but it had just undergone extensive rehabilitation and a new personnel building was about completed. The challenge was accepted, and in August, 1952, the task started; the new Superintendent bringing the resident medical staff to four. The immediate survey pointed to the fact that a substantial increase in operating funds, plus several years time, would be imperative to build a staff of adequately trained employees capable of developing an active hospital program.

Medical Deficits

There were no regular medical consultants, no pharmacy service, no planned x-ray surveys for tuberculosis, no program of music or recreation, no planned rehabilitation, no full-time chaplaincy service, and autopsies were never done. The laboratory was poorly equipped, x-ray equipment was obsolete and unsafe, the electrocardiograph was not functioning, and there was no electroencephalograph.

Actual medical care was lagging. Surgery was rarely done. Diagnostic and therapeutic staffs were no longer held. A vast backlog of new patients had not had physical examinations, nor had histories been taken. Shock treatment was largely limited to the disturbed patient. Medical records were inadequate and often failed to reflect the patient's course in the hospital. A medical records librarian was non-existent. Social Service was limited to a short intake history, and field trips for the purpose of visiting patients on convalescent leave.

Patient care was largely custodial. The emphasis had been placed on low cost of operation for 40 years. The locking of patients in rooms at night was the rule, and seclusion by day was widespread. Handcuffs and strait jackets were constantly in use for many. Disturbed patients and the feeble and untidy patient were locked into "soilers rooms," some in strait jackets or tied to benches, where they often remained throughout the day with no effort made toward retraining them. Rumors of patients being mistreated were too frequent, but promptly lessened when an employee was prosecuted for flogging a patient.

Staff Reorganization

Much of our groundwork of planning was laid immediately. However, our major accomplishments have taken place during the past three years. We now have regular weekly meetings of all department heads, regular diagnostic staff meetings three times a week, as well as daily morning medical staff meetings with the Superintendent and Director of Nursing. An outstanding nursing department has been developed. All attendants are directly responsible to the staff of 29 registered nurses. (Five have college degrees.) An Affiliate Student Nurse Program was started in February, 1955, and to date, about 300 students have been enrolled.

A qualified Social Service Director was employed in 1954. He has four qualified assistants and necessary secretarial help. This department has a progressive program of some pre-admission studies, regular consultations with the patients and families during hospitalization, and procedure for release which provides regular periodic check-ups. An Outpatient Clinic has been established where 75 per cent of all patients on convalescent leave return for check-ups, their families being seen by the Social Service Department, and the patients by the psychiatrist.

A complete medical consultant staff has been obtained, all members of which conduct regular clinics in their specialities.

Staff organization, constitution, and by-laws were adopted in 1956. The resident medical staff has ranged from five to nine in number over the past three years—far too low, but an increase of 200-300 per cent. Half of this staff

*Presented before the Kentucky Psychiatric Society during the KSMA annual meeting on September 18, 1957.

are qualified phychiatrists. Close working relationships with the local general hospital and the University Medical Center have improved medical and surgical care of our patient population. The laboratory personnel has been expanded from one to four technicians. A new X-ray laboratory was installed in 1955, a new electroencephalographic laboratory in 1956, and further improvements are planned. The autopsy rate has increased to about 20 per cent, and should exceed this in 1957-58.

Medical records have become modernized since the employment of a registered medical records librarian in 1954, and now meet all requirements. Vertical open shelving has replaced cumbersome filing cabinets. A master patient record index, a disease index, a disease cross-index, operations and tranquilizing drug indices are in use. Permanent records are kept on autopsies, staff meetings, consultations, and operations.

Improvements in Therapy

The psychiatric treatment program and the concept of the hospital as a "therapeutic community" with team approach and "total push" has been taught and accepted by almost all employees. Diagnostic procedures have been standardized, including admission interviews, progress notes, routine physical examinations, routine X-ray on admission, yearly surveys through the Health Department, and laboratory procedures such as serology, complete blood count, urinalysis, and others. A graduate pharmacist was obtained in 1953, and the pharmacy was re-organized with a well-rounded inventory of drugs. Tranquilizing drugs are being used widely, with central statistical control.

An increasing per capita expenditure (now about $4) has made possible an increase in the number of employees, from a 4.5 to a 3.2 patient ratio—exclusive of 40 affiliate nurses. All new attendants are enrolled in an intensive basic psychiatric nursing program for a period of one month. The employee turnover rate has decreased from 45 per cent to approximately 20 per cent, which is the lowest of Indiana's ten mental institutions.

Administrative Gains

On April 1, 1956, the first hospital-trained Business Administrator was appointed, from the Butler Hospital in Rhode Island, to assume the duties formerly assigned to a Chief Clerk. At the time of the appointment of the present Superintendent in August, 1952, all accounting and payroll work was in the hands of four employees, and office management was not the best. During the past three years, a perpetual inventory system has been set up covering drugs, food, clothing, and housekeeping supplies. Yearly service contracts on all types of equipment are now in effect. Patients' Trust Funds and Maintenance Accounts are now kept on a bookkeeping machine.

Prior to 1953, no attempt was made to keep individual employee records. Time keeping and payroll records were cumbersome and inaccurate. Development of a Personnel Department was begun in 1953, with the addition of a trained and qualified personnel officer. This department now functions at all levels of employment, and prepares and maintains employment applications and records for all employees. Regular performance evaluations are made a part of every employee's personnel file. Group and individual counselling is being used to bring about better employee and employer relationships.

Food and Laundry Service

Food service, before 1952, was supervised by untrained personnel. Production came first; sanitation, balanced diets, table service, and food preparation were secondary. Meals were served in bowls—family style. Knives and forks were prohibited. The employees' diet was better. Steaks, chops, and pastries were rarely served to patients. Drastic changes were soon instituted, including a common menu for patients and employees. All principal dining areas were issued knives and forks, and cafeteria service was adopted. Early in 1954, a registered dietitian was employed to direct all food services. A special diet department came into being. Improvements in food preparation, service, variety, and new methods were added. The old coke oven was replaced by a newly equipped bakery in 1956.

A laundry service is no less important than the food service. Sixteen-hundred patients and 500 employees, besides 40 student nurses, require a well-managed laundry. During these expanding years, about $50,000 worth of equipment has been added, and the number of laundry employees increased from 10 to 18.

Occupational Therapy

Prior to 1956, the Occupational Therapy Department was operated mostly on a production basis. Needlework articles for sale, shoe re-

pairs, broom and brush making, and re-upholstering and repair of furniture made up the bulk of its operation. A registered Occupational Therapist was employed as director in February, 1956. Cooperation with the medical staff with reference to the type of service this department can give the patient is of the utmost importance on the patients road back to mental health. Patient enrollment in occupational therapy increased over 100 per cent during the past year. Improvements in buildings occupied by the department, many pieces of new equipment, and the addition of new items to be made in the department have all served to maintain and increase patient interest. Classes in Occupational Therapy have been started on most wards, as well as in three central locations. With the cooperation of the State Vocational Rehabilitation Board, a program of partial training in vocations and follow-up after discharge has been set up.

Safety Provisions

One of the outstanding accomplishments at this Hospital has been the development of the Fire and Safety Department. Hand-drawn hose carts were replaced in 1954 by new motorized equipment. A 600 gallon per minute pumper manned by 25 volunteer employees, who were fully trained and under a full-time Fire Chief and Safety Director, is now available for any emergency. There are weekly inspections of all buildings occupied or used by patients. Two-hundred and twenty-five fire extinguishers have been installed. Over 100 employees, nurses, attendants, maintenance personnel, kitchen employees, and others, form evacuation crews, fully trained in the proper methods of safe, fast evacuation of patients in case of fire or disaster. A centrally located fire siren was installed in 1957, and an improved system of reporting the location of a fire has been implemented.

Social Activities

Patient social activities at this Hospital are under the supervision of a full-time Recreation Director and a Music Therapy Director. Started in 1953, these two departments now employ 11 professionally trained persons, who work closely with the medical staff in the care and treatment and entertainment of the patients. Movies, dances, ward parties, birthday parties, softball, tennis, picnics, religious services, a fiction library of 2,200 volumes, 52 daily and weekly newspapers, and 35 magazines contribute in great measure to the rehabilitation of the patient. In 1954, music therapy was re-organized. A patients' mixed choir of 35 voices has been organized and has appeared on television five times, and entertained at concerts, both at the Hospital and the nearby communities, as well as on radio.

Volunteer groups are becoming important in the work with patients. Formerly, the public felt "locked out" and had little interest in the Hospital or its patients. A dinner for members of the local Chamber of Commerce, which was served in a patients' dining room, proved to be a revelation to the guests, and the local newspaper in the next day's issue carried a four column, front page article headlined, "The Latchstring Is Out at Cragmont." A full-time Volunteer Service Director was appointed in November, 1955.

Since 1953, a full-time chaplain has been on the staff. A number of two-day institutes in mental illness have been held for the clergy of the Hospital district.

Conclusion

The foregoing are some of our principal achievements which reflect on patient care. The growing confidence which the people of Southern Indiana have in the Hospital is manifested through an increase in volunteer commitments from nearly zero to 35 per cent of all patients under 60 years of age. Although admissions have increased during the past five years by 47 per cent, the daily census has remained nearly constant; reflecting a continued increase in the number of convalescent leaves and discharges. The high morale throughout the employee group and the "let's-get-well" spirit among the patients cannot be expressed in this report.

High Voltage Diagnostic Techniques *

Robert D. Shepard, M.D.; John F. Berry, Jr., M.D.; Ollie J. Sparks, R. T.
Lexington, Ky.

IN 1954, Carl Wegelius[9] of Stockholm postulated that the use of high kilovoltage rays in diagnosis would gain in practical importance. It seems to us that the time is near when we must, of necessity, use such techniques in certain examinations. Since the question of radiation dose has caused such a very vast interest in diagnostic Roentgenology, the use of high kilovoltage is one means of reducing this problem. It has been conclusively shown[4] that high energy permits shorter exposure; lowers the patient's radiation dosage, and permits the use of a smaller focus with consequent increase in sharpness.

In 1949, the studies of Trout[7] and his group indicated that over a wide range of voltage, the changes are such as to leave little doubt of the value of higher voltages for some types of work. According to Tuddenham[8] the use of so-called "high-kilovoltage" roentgenography may be regarded as one attempt to take advantage of the more uniform absorption characteristics resulting from the use of shorter wave-length radiation.

First Experience

Our first experience with high kilovoltage was about three years ago. We had installed a transformer and tube with capacities up to 140 Kv.P.

In an attempt to produce a more satisfactory chest x-ray and to give us a greater uniformity, especially for follow-up examinations, newer techniques were studied (Fortunately the annual hospital employee chest survey aided in reaching our conclusions). Most suited to the idiosyncrasies of our equipment are the factors of 100 KV, 300 MA, with variances of exposure time in accordance with the patient measurements. In order to decrease scatter, which accompanies high voltage, a stationary grid is necessary. At the present time we are using grid cassettes with sixty lines per inch, but have on order a Smit-Roentgen "Golden Jewel" grid which has 110 lines per inch. There is a surprising increase in latitude with high voltage. The shadows of soft-tissue are very little changed, but the rib shadows (decreased absorption by bone) are much diminished and consequently hide the other shadows less.

Newell and Garneau[5] state that the hardness of the x-ray used for chest radiography makes little difference in the visibility of faint pulmonary shadows, but what difference there is favors the harder quality.

Colon Examination

Using the reports of Gianturco[2], Gianturco and Miller[3] and Wietersen[10] as a basis, we changed, a few months ago, to high kilovoltage methods in routine investigation of the colon. It was at this time that we realized the technical settings reported could only serve as a basis. Apparently the equipment, line voltage and such factors vary enough between different laboratories that each must conduct their own studies for setting up technique charts. We used an aluminum step wedge in a water phantom. Exposures were made at conventional readings of 75 KV, 3/4 sec., and 100 MA. Step four of the wedge was selected as the standard. The KV was then increased to 120 and exposures made with reduction in time until a comparable visual density was reached. In so doing the MA factor was reduced from 75 to 10. Next, studies were made to determine what could be expected with varying thickness. From this it was determined what KV or MA change would give the most accurate visual density. For our purposes we find the use of 120 or 125 KV with variance of the MA are most suited and have set up a technique chart which includes thicknesses from 15 to 36 cm.

As is well known, the detection of small polypoid lesions in the colon is quite difficult under the most ideal circumstances. Also, we are aware of the disadvantage of air contrast studies as a routine procedure. Since it is of importance to detect the unsuspected and asymptomatic lesions (which comprise about 75%), the high voltage technique affords us a simple method that can be done in a single operation, and entailing minimal radiation exposure to the patient.

Preparation of Patient

As in all methods of colon radiography, the preparation of the patient is of prime impor-

*Presented at meeting of the Kentucky Radiological Society at the KSMA annual meeting on September 18, 1957.

tance. In this procedure, as in others, fecal material, gas bubbles and oil particles can cause confusing shadows. We are using almost routinely, "X-prep" which seems to purge the patient slightly better than castor oil and prevents the problem of oil particles. In those cases in which there is any question, we ask for a re-prep following 24 to 48 hours on an absolute, non-residue diet.

We also found that no two technicians can measure identical amounts of barium. This gave some difficulty at first, but was solved by weighing the necessary amount of barium, which in our department is 200 grams, which amount is mixed with 1500cc of water. Thus we have a fairly stable and uniform barium density which can be readily visualized fluoroscopically. Following palpation, spot filming, etc., under fluoroscopic visualization, three exposures are made in an AP and both oblique projections. After the patient evacuates, a post-evacuation film is made with conventional technique. This gives a soft tissue detail which is eliminated by the high-voltage. In order to remove the increased scatter produced by high-voltage, a high-rate Bucky must be used, employing either 12 or 16:1 grid-rates. While 16:1 is superior in the clean-up of stray radiation and is advocated by many[7,2,10], the 12:1 produces a faster grid free time due to an increase in the number of lines per inch (80 vs 60).

The greater penetration of the roentgen rays is of tremendous advantage and especially effective in detailing the various segments of the bowel, especially in the heavy, obese patient.

As stated above, fecal material and especially air bubbles are troublesome. In any case, however, that shows a suspected lesion, a second study should be carried out for confirmation.

Knowing, from the works of others[4,9,10], that the radiation exposure to the patient is reduced, we proceeded to determine, for our own edification, just how much. It was extremely gratifying to find that the three films made at high kilovoltage reduced the surface dose from 1.01r at conventional techniques to 0.25r, a reduction of approximately 75%. These readings were made at the lowest MA factor used, but with the addition of at least 3mm aluminum filter, there is still a reduction of approximately 50% in surface dose in the higher MA ranges. An image amplifier reduces the table top output of our fluoroscopic tube to 3 1/2r per minute. Therefore this entire procedure reduces tremendously the radiation exposure to the patient; a distinct advantage in itself.

Biliary Tract Studies

In addition to chests and colon studies, we have tried high-voltage in other examinations; for instance, Cholografin® studies of the bile ducts. Here, however, the tremendous penetration is a distinct disadvantage, since the concentration of opaque is not sufficient to allow for good contrast and the duct outline is greatly diminished. For this procedure, the conventional technique, plus laminography when warranted, still seems best.

Gallbladder studies were also tried with the technique, but no particular advantage could be seen. While it is true that there is greater penetration of a dense concentration of Telepaque®, no further information could be gained over present methods in which routine, upright, pressure spots are made. In fact, in those cases showing a rather medium to faint concentration, the greater penetration resulting in loss of soft tissue definition is a disadvantage.

Bone Technique

Ordinarily there is decreased bone absorption with the use of high voltage technique and, consequently, decreased bone outline and detail. At the same time distinct visualization of bone through a plaster cast, especially with reference to early healing of a fracture, is quite difficult with conventional methods. Because of this we decided to try high-voltage in these cases. The increased penetration seems to diminish the cast detail and decreases its obscuration of the underlying bone. At the same time the bone structure is preserved and distinct, and detection of early healing seems to be enhanced. This particular phase, however, has not been completed to our satisfaction, but present indications seem to point toward another use of high kilovoltage. The present studies were made with non-screen, film, 105 KV, 150 MA with 0.3mm focus and 12:1 bucky grid for the thicker parts and 105 KV, 50 MA with 1.5mm focus for thinner parts.

Thanks to Macklett, these later studies have been possible. We were loaned a water-cooled, rotating anode tube capable of 150 KV (Peak) with a 0.3 and 1.5mm focal spots. The tube capacity, when using the larger focus, is such that to date we have never approached the limit set forth by its rating chart from 150 MA

down. When operating on the fractional focus, the tube is capable of 150 KV (Peak) at 4.5 MA continuous indefinite.

In order to reduce radiation dosage to both the mother and fetus, we are now using high kilovoltage technique in all pelvimetries. Since we are not concerned with the fine bone detail, the outline of fetal and pelvic bony structures is quite sufficient for accurate measurements.

Conclusion

High-voltage radiography should be looked upon as a means of obtaining an improved result in certain types of examination, the end result being obtained with short exposure, without loss of contrast, and with reduced radiation exposure to the patient.

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A Pledge for Kentucky Physicians

I do solemnly swear that I will make every effort to attend the 1958 KSMA Annual Meeting in Louisville on September 23, 24, and 25—and with this pledge, I promise to take immediate action by:

1. *Circling September 23, 24, and 25 on my calendar*
2. *Making arrangements for another physician to handle my practice*
3. *Writing for hotel reservations, if needed*
4. *Notifying patients that I will be out of the office for purpose of adding to my medical "know-how"*

Recognizing that the objective of the Association's Annual Meeting is to contribute to my medical knowledge by providing a varied, interesting and valuable program of postgraduate medical education, I hereby pledge myself to take an active interest in all scientific sessions, exhibits, and in all phases of the program leading to the advancement of the KSMA and the profession of medicine.

Complications Occurring During or Immediately Following Surgical Procedures

BENJAMIN B. JACKSON, M.D.*
Louisville, Ky.

METHODS of resuscitation have advanced remarkably within the past few years. No doubt the greatest stride in the surgical care of the acutely injured patient has been the use of whole blood and plasma.[2, 3]

Blood and Plasma

It is obviously unwise to plan major surgery calling for considerable dissection unless blood is provided. On occasion, however, unanticipated and rapid loss of blood may cause near-shock. A tear in the spleen during gastrectomy or vagotomy, a rent in the portal vein during a pancreatico-duodenectomy, a laceration of the sacral veins during a combined abdomino-perineal resection or loss of the cystic artery during cholecystectomy or pulmonary vessels at the time of lung resection can result in a rapid loss of blood. Stopping the hemorrhage and restoring the blood volume with whole blood will help save the patient. If whole blood can not be obtained, plasma and dextran will prevent death from uncontrolled shock until blood can be instituted.

During protracted operations with continuous exposure of serosal surfaces, plasma infusions are warranted. Anyone who has used a Lahey bag during operations on the aorta will be impressed with the transudate that collects in the rubber bag. The loss of plasma is often enough to produce detectable hemoconcentration. This rise in red cell mass may be directly responsible for postoperative thrombosis of arterial crafts, myocardial infarction, and cerebro-vascular accidents. Too much or too rapid infusion of blood, plasma or electrolyte may overtax the marginal cardio-pulmonary reserve in the elderly patient and cause irreversible pulmonary edema. However, hypotensive episodes are just as poorly tolerated. The morbidity and mortality from myocardial infarction and cerebro-vascular accidents rise sharply in older patients who have experienced a bout of hypotension during or immediately after an operation.

Occasionally a crushing injury of the pelvis will tear the pelvic veins so that an uncontrolled hematoma can dissect retroperitoneally out of the pelvis and rupture into the peritoneal cavity. When transfusion does not stabilize the patient, he should be explored. If the bleeding is from the friable sacral veins, it is probably wise to dissect the pre-sacral space as in the Miles' operation and pack it rather than attempt ligation of the veins. It may be justifiable to ligate the hypogastric arteries in this situation. One must not be confused by the retroperitoneal dissection of urine from a ruptured bladder in crushing injuries of the pelvis.

Cardiac Arrest

Cardiac arrest, no matter how infrequent, is always alarming to the surgeon. Four minutes without oxygen causes irreversible cerebral damage.[4] The first response of the surgeon when arrest occurs is to pound vigorously on the anterior chest. If this does not promptly restore normal sinus rhythm, an endotracheal tube should be inserted. The chest should be opened immediately in any patient under 60 years of age when there are no obvious extenuating reasons.[14] Massage should be carried out through an incised pericardium at a rate of 60 to 80 strokes per minute. No medication is administered until an electrocardiograph can be attached and the actual nature of the arrest determined. If ventricular fibrillation is disclosed, an electric shock will be required to restore sinus rhythm. If the heart is in asystole, 4 cc. of 10% calcium chloride and 2-3 cc. 1-10,000 epinephrine injected into the left ventricle may prove helpful. The aorta should be compressed at the time of intra-cardiac injection so that the coronaries will be perfused. Once contractions are resumed, it may be necessary to provide a nor-epinephrine infusion in order to maintain blood pressure. If considerable blood loss resulted from the thoracotomy, a blood transfusion will be helpful.

Not infrequently the chest will be opened under unsterile conditions. The anxiety of the surgeon under this exceptional stress may result in a laceration of the lung. If this happens, the laceration should be repaired before the

*Instructor, Dept. of Surgery, University of Louisville School of Medicine.

chest is closed. Air leaks and hemorrhage can otherwise become a problem. The pericardium should not be closed tightly as tamponade can occur from the transudate of a traumatized heart. Anterior and posterior chest catheters should be inserted routinely in order to avoid hemo-pneumothorax. These catheters are usually removed in 48 hours. When thoracotomy is done under unsterile circumstances, massive dosages of antibiotics should be given. Chloromycetin and Erythromycin have proved very satisfactory in the past. Should empyema develop, closed drainage or repeated aspirations will usually handle the problem. Once a definite cavity has formed, rib resection and drainage is the best approach. There will be some loss of lung volune with this method, but it seems unwise to attempt a formal decortication of the lung in such a precarious patient.

Case I

A 49-year-old white man was admitted to the emergency ward with a 4 hour history of severe chest pain. An EKG revealed a large anterior myocardial infarction. While under observation, he suddenly became unresponsive. The EKG disclosed ventricular fibrillation. Simultaneously, an endotracheal tube was inserted and the chest was opened. The ventricular fibrillation was converted to a normal sinus rhythm with an electrical defibrillator. Massive doses of antibiotics were given for five days, because the chest had been opened under unsterile conditions. Empyema developed six days following the surgery and was treated successfully with closed drainage initially, followed by open drainage as soon as a definite cavity was demonstrated by x-ray.

Emphysema

A number of patients with emphysema have difficulty in resuming adequate ventilation and oxygen exchange after operation.[1] The rate is either too fast, with too shallow breathing, or the rate is too slow for useful exchange. In the former there is apt to be bronchospasm. Isuprel,® aminophyllin, small doses of intravenous Demerol® and humidified oxygen often prove helpful. If the patient simply cannot breathe as a result of anesthetic relaxant, drug intoxication, brain damage or too little reserve to initiate respiration, he is helped remarkably with an endotracheal tube connected to an assistor.[10] The Jefferson respirator which provides controlled respiration or the Bennett or Emerson assistors which offer intermittent positive pressure may be of aid. The endotracheal tube should be left in place until the patient resumes spontaneous respiration.

Aspiration

Not infrequently patients with bronchiectasis or asthma have an outpouring of secretions in the immediate postoperative period. Aspiration of gastric contents is a hazard in the semi-awake patient. If naso-tracheal suction does not clear the tracheo - bronchial tree, bronchoscopy should be done. Tracheostomy is indicated if repeated bronchoscopies must be carried out. When indicated, a tracheostomy is life saving; however, it may become a two-edged sword. Contamination from the exterior can produce a fulminating staphylcoccal pneumonia.

Naso gastric tubes should be used judiciously. A tube in the esophagus and stomach tends to relax the esophago-gastric junction. With this reduction in tone, regurgitation and aspiration pose a real problem. Many elderly patients can tolerate major surgical procedure if their convalescence is not beset with complications.

A feeding gastrostomy is recommended for any patient who is unable to swallow. The use of the gastrostomy is especially helpful in patients with central nervous system disease, in cases of protracted coma, or after radical operations on the head or neck for carcinoma.

Case II

A 19-year-old white male was admitted to the hospital with complete tetraplegia and failing respiration, secondary to poliomyelitis. Controlled respirations were maintained with the Jefferson respirator. A plastic stomach tube was placed in the stomach to make possible adequate caloric intake. Numerous bronchoscopies were required to remove the abundant secretion. Carmine red injected into the stomach thru the feeding tube was recovered in the bronchoscopic aspirations. A feeding gastrostomy eliminated the atelectasis and secretions remarkably. My last report on the patient was that he had resumed normal respiratory function, but the tetraplegia had not cleared.

Perforation of The Esophagus

Violent coughing, retching, vomiting, and endoscopic procedures may result in perforation of the esophagus. The perforation usually occurs in the distal esophagus with rupture into the left thorax. The patient may develop a left tension pneumothorax, which requires immed-

The Achievements of

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...in Skin Diseases: In a study of 26 patients with severe dermatoses, ARISTOCORT was proved to have potent anti-inflammatory and antipruritic properties, even at a dosage only ⅔ that of prednisone[1]... Striking affinity for skin and tremendous potency in controlling skin disease, including 50 cases of psoriasis, of which over 60% were reported as *markedly improved*[2]...absence of serious side effects specifically noted.[1,2,3]

...in Rheumatoid Arthritis: Impressive therapeutic effect in most cases of a group of 89 patients[4]... 6 mg. of ARISTOCORT corresponded in effect to 10 mg. of prednisone daily (in addition, gastric ulcer which developed during prednisone therapy in 2 cases disappeared during ARISTOCORT therapy).[5]

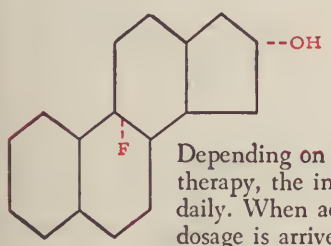
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...in Respiratory Allergies: "Good to excellent" results in 29 of 30 patients with chronic intractable bronchial asthma at an average daily dosage of only 7 mg.[6]... Average dosage of 6 mg. daily to control asthma and 2 to 6 mg. to control allergic rhinitis in a group of 42 patients, with an actual reduction of blood pressure in 12 of these.[7]

...in Other Conditions: Two failures, 4 partial remissions and 8 cases with complete disappearance of abnormal chemical findings lead to characterization of ARISTOCORT as possibly the most desirable steroid to date in treatment of the nephrotic syndrome.[8,9]... Prompt decrease in the cyanosis and dyspnea of pulmonary emphysema and fibrosis, with marked improvement in patients refractory to prednisone.[10,11,12]... Favorable response reported for 25 of 28 cases of disseminated lupus erythematosus.[13]



Depending on the acuteness and severity of the disease under therapy, the initial dosage of ARISTOCORT is usually from 8 to 20 mg. daily. When acute manifestations have subsided, maintenance dosage is arrived at gradually, usually by reducing the total daily dosage 2 mg. every 3 days until the smallest dosage has been reached which will suppress symptoms.

Comparative studies of patients changed to ARISTOCORT from prednisone indicate a dosage of ARISTOCORT lower by about ⅓ in rheumatoid arthritis, by ⅓ in allergic rhinitis and bronchial asthma, and by ⅓ to ½ in inflammatory and allergic skin diseases. With ARISTOCORT, no precautions are necessary in regard to dietary restriction of sodium or supplementation with potassium.

ARISTOCORT is available in 2 mg. scored tablets (pink), bottles of 30; and 4 mg. scored tablets (white), bottles of 30 and 100.

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iate attention. The diagnosis is not difficult once it is considered. Air in the mediastinum, left hydro - pneumothorax, or subcutaneous emphysema, especally in the left supraclavicular fossa, are all helpful clues. The diagnosis should be confirmed by x-rays of the esophagus following the ingestion of a radio-opaque, water soluble liquid. As soon as the diagnosis is established, the esophagus should be surgically closed.

Case III

A 63-year-old female suddenly became cyanotic and had labored, rapid respirations on the 20th day following a Whipple operation for carcinoma of the ampulla of Vater. She had left supraclavicular subcutaneous emphysema and fluid in the left chest. The nurses reported a bout of retching and vomiting about 30 minutes before the episode. The correct diagnosis of perforated esophagus was made 18 hours later. In spite of suturing of the esophagus and vigorous supportive measures, she died 42 hours after the perforation.

Massive Pulmonary Embolus

Massive pulmonary embolus ranks along with myocardial infarction as one of the most serious emergencies in the surgical patient. Frequently the electrocardiogram will demonstrate right heart strain or even frank cor pulmonale but this can not be depended upon. Crushing chest pain, hemoptysis and distention of neck veins are somewhat more reliable. Occlusion of the bifurcation of the main pulmonary artery is usually rapidly fatal but occlusion of either the right or left pulmonary arteries may be tolerated for hours or even days. Supportive measures such as digitalis, broncho-dilators, nasal oxygen and sedation usually do not tide the patient over. It is in this group of patients with massive obstruction of the main pulmonary channels that the Trendelenburg operation is applicable.[8] The Trendelenburg operation does not apply to pulmonary emboli involving the small arteries of the pulmonary tree. The treatment of segmental or subsegmental infarction may be managed with bilateral superficial femoral vein ligation and/or anticoagulant drugs. In the face of repeated emboli following femoral vein interruption, the inferior vena cava should be ligated.

Adrenal Cortical Insufficiency

Patients with steroid insufficiency usually have had protracted illness with or without infection, multiple operations, or have had cortisone or cortisone-like compounds within a six-month-period before operation. The usual tests of adrenal cortical function reveal no evidence of Addison's disease in these patients prior to operation. However, during or immediately following a surgical procedure, they develop sudden collapse that responds to intravenous hydrocortisone. The surgeon must be certain he is not dealing with hemorrhagic shock before he begins steroid therapy. The initial dose of adrenal steroids usually is administered in the form of hydrocortisone as 100 mg. in 500 cc. of 5% glucose in distilled water.

If the sudden collapse is attributable to adrenal insufficiency, there will be an immediate restoration of vital signs upon intravenous administration of hydrocortisone. Doses as large as 300-500 mg. each day may be required.[6] Once collapse has occurred, it takes about twice as much adrenal steroid as it would had the patient been primed preoperatively. The dosage should be gradually decreased and then omitted. Antibiotics should be given all surgical patients who get steroids because infections may progress in the absence of systemic response.[5] Nor-epinephrine will not ameliorate this type of shock. It appears that the clinical history is the best guide to the use of adrenal steroids in sudden collapse.

Any patient who has received cortisone within a six-month-period before operation should be primed with cortisone started twenty-four hours preoperatively.[13] If the clinical history suggests the possible need for cortisone, it should certainly be on hand during and immediately after the surgical procedure.

Case IV

A 33-year-old female went into sudden vascular collapse 20 hours following a total colectomy for severe debilitating ulcerative colitis. Serum electrolytes and hemoglobin were within normal limits. She had had 3 previous operations for ulcerative colitis during the 6 months before the present surgery. Following intravenous administration of 100 mg. of hydrocortisone in 500 cc. of 5% glucose in distilled water, there was a dramatic restoration of vital signs. Recovery was thereafter assured by maintenance doses of cortisone up to 300 mg. a day and then gradual reduction to the point of omission.

Acute Renal Failure

Renal tubular necrosis is a complication of the shock which may occur in burns, trauma,

infection, extensive operations, and abdominal catastrophes.[9] The shock may produce ischemia of the renal cortex with subsequent necrosis of the renal tubular epithelium. The clinical picture is characterized by scanty, dark urine with proteinuria, casts, debris and an elevated specific gravity. There is also azotemia, hyperpotassemia and a tendency toward acidosis. The primary etiological agent must be corrected or improved. The fluid intake should be limited to the replacement of insensible water loss (usually 600 to 1000 cc.) in an effort to prevent massive edema. Cation exchange resins are helpful in preventing cardiac arrest from hyperpotassemia. Serial electrocardiograms are important in the interpretation of the myocardial response to altered serum electrolytes. Antibiotics should be given all patients with this complication. If the patient can be steered through the immediate crisis, the regenerated tubular epithelium will begin assuming excretory function in 8 to 12 days.

Case V

A 55-year-old white male underwent an excision of an epidermoid carcinoma of the apex of the right upper lobe of the lung. During and immediately following the operative procedure he was in shock from excessive blood loss. After 6-8 hours and 5000 cc. of whole blood, the blood pressure rose to a normal level of 130/90 and remained constant. However, 48 hours following the operation he became anuric. He was treated with 600 cc. of 10% dextrose and water and with cation exchange resins in an effort to maintain a normal fluid and electrolyte pattern. Antibiotics were given prophylactically. By the 17th day renal function was restored and his subsequent hospital stay was satisfactory.

Hepatic Coma

Patients with marginal liver compensation who undergo emergency surgery for gastrointestinal hemorrhage may develop hepatic coma in the postoperative period. One of the causes of this is the rising serum ammonia. Intestinal bacteria release large amounts of ammonia from the breakdown of blood in the bowel. This ammonia is normally converted to urea in the liver with subsequent excretion in the urine. If the decompensated liver can not convert the ammonia to urea, frank hepatic coma may intervene. Davidson, et al, found that dietary protein restriction, enemas and cathartics to rid the bowel of residual blood and wide spectrum antibiotics to depress the intestinal bacteria were the most effective agents in the management of hepatic coma.[12] Glutamic and aspartic acids have been tried with varying results.[5, 7]

Postoperative Bleeding Due to Clotting Defects

Usually the clinical history, white blood count and smear are the only bleeding studies required for the patient undergoing elective surgery. There are patients, however, who have a latent hemorrhagic diathesis which becomes manifest during or immediately after operation. Should the surgeon encounter a patient who continues to bleed following surgery, a thorough evaluation of the clotting mechanism is indicated. Hemophiliacs are usually well known and can be primed with fresh frozen plasma which contains Fraction I.

The prolonged bleeding time seen in latent idiopathic thrombocytopenic purpura will usually respond to splenectomy and/or cortisone. In bleeding from a prolonged prothrombin time from either poor absorption from the bowel or decreased conversion of vitamin K in a decompensated liver, intravenous vitamin K (Mephyton®) will usually improve the bleeding tendency.[11] Sudden decompression of the liver following prolonged obstruction of the biliary tree by stone, stricture, or neoplasm may further decompensate the liver, making it impossible to maintain adequate prothrombin levels. Fresh whole blood may tide the patient over until the liver can assume some of its function.

Patients who have liver disease and who have been on anticoagulants for lengthy periods for phlebitis or myocardial infarction may have a depressed prothrombin level in spite of intravenous vitamin K. If surgery is contemplated in this group, complete clotting studies are indicated. At least a week of normal clotting determinations should be obtained prior to operation. Intravenous preparations are now available to combat circulating fibrolysins which can occur in carcinoma of the prostate and liver and premature separation of the placenta.[15]

Case VI

A 46-year-old male with long-standing mitral stenosis developed a coagulation defect following a mitral valvulotomy. This patient was

known to have had impaired liver function following a bout of infectious hepatitis. Six months prior to this hospitalization, he was given dicoumarol because of a small cerebral vascular accident which cleared completely. Prior to his valvulotomy he was converted to normal prothrombin time with vitamin K. Following the operation, bleeding into the left pleural space and from the wound edges was noted. Coagulation studies revealed absence of plasma thromboplastin component. He was treated with vitamin K, fresh blood, and fresh frozen plasma with restoration of the clotting mechanism. His convalescence was otherwise satisfactory.

Summary and Conclusions

1. Stopping hemorrhage and giving whole blood will help save the surgical patient.

2. Plasma is indicated in operations requiring prolonged exposure of serosal surfaces.

3. Cardiac arrest is divided into asystole and ventricular fibrillation. Electric shock is needed in addition to cardiac massage in ventricular fibrillation.

4. Emphysema with bronchospasm is treated with humidified oxygen, intravenous sedation and broncho-dilators. Emphysema without spasm is managed with controlled or assisted respiration in addition to the usual supportive measures.

5. Aspiration should be prevented by nasotracheal suction, bronchoscopy or tracheostomy.

6. The diagnosis of perforated esophagus can be made from the history and confirmed by x-rays.

7. A gastrostomy is recommended in any patient who cannot swallow and whose prognosis is hopeful.

8. Patients who need adrenal steroids usually have had chronic illnesses, multiple operations, or have had cortisone or similar compounds within a six-month-period before operation.

9. Prevention of massive edema, hyperpotassemia and acidosis during the period of renal tubular regeneration are important factors in the management of tubular necrosis secondary to shock.

10. Hepatic coma is most satisfactorily treated with dietary protein restriction, cathartics, enemas and wide spectrum antibiotics.

11. Postoperative bleeding should be corrected on the basis of the etiology of the defect.

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Carcinoma of the Tongue and Lip

J. B. Holloway, M.D.
Lexington, Kentucky

THE surgical treatment of carcinoma of the tongue and lip has been standardized reasonably well within the last ten years. These two lesions, despite their proximity and similar cellular pattern, are to be treated distinctly differently, for they are entirely different in their natural history and their biological tendency. They do, however, form a nice group for discussion purposes.

Carcinoma of the Lip

Carcinoma of the lip is confined to the lower lip in over 95 per cent of the cases. It is a readily accessible and early diagnosed tumor from which splendid results may be obtained in the vast majority of cases provided treatment is undertaken when the lesion first presents itself. Good results may be obtained either by x-ray, radium, or excision of the lip, all of which give a good cosmetic as well as therapeutic result. One mode of treatment is certainly not superior to the others. Failures do occur with any regimen and occasionally one finds a young patient with a biologically malignant tumor in which no treatment is of any avail.

The question of the advisability of neck dissection frequently arises. It is my feeling and the feeling of most that the so-called "prophylactic" dissection should not be carried out with this disease but that the patient should be examined at frequent intervals so that if nodes appear, neck dissection may be carried out at that time. Should the patient have palpable submental nodes at the time of primary treatment a supra-hyoid dissection may be sufficient.

Carcinoma of the Tongue

Carcinoma of the tongue presents an entirely different problem. Its biologic potential is much more deadly. The results obtained are not what we wish and the methods of treatment do not satisfy our desires. Carcinoma of the anterior third of the tongue may be satisfactorily treated either by roentgen therapy, radium needles, or surgery. Radium needles present a difficult problem as regards placement and stabilization of the individual needle. In addition they are painful, since they must remain in place 48 to 72 hours. Their use has virtually been abandoned.

Therapy

Roentgen therapy and surgery serve equally well upon lesions of the anterior one-third of the tongue, principally I believe because of the accessibility of the lesion. The lesions in the middle and posterior thirds present one of the most discouraging cancer problems we have today. A review of 37 cases of carcinoma of the posterior third of the tongue treated adequately by radiation reveals that there is only one 5 year survival. In contrast to this, radical surgery employing neck dissection concomitantly gives a salvage rate of 33.3 per cent in a goodly number of series throughout the country. Such surgery produces a mortality rate in the neighborhood of 10 per cent. Many cases have distressing complications which prolong their postoperative treatment and successful surgery leaves a poor cosmetic result. Surgery must be undertaken early in the course of the disease. Selection of cases for surgery should be discreet, for far advanced cases simply increase the already high mortality and morbidity rate.

It is my firm belief that so-called "prophylactic" neck dissection should be done at the time of the primary resection as some 67 per cent of these patients will have metastasis to the cervical nodes. These metastases are frequently microscopic. Contraindications to surgery are: (1) a lesion across the midline to the tongue; (2) fixed nodes in the neck; (3) draining sinuses in the neck, and (4) evidence of widespread tumor.

The resection should include the primary lesion and the neck contents. We feel that prostheses are not necessary in these patients as they do very well following resection. By introducing foreign bodies one tends to add complications and add to the mortality as well as morbidity. Tracheotomy at the time of operation is important. A goodly number of patients will receive palliation for several years, particularly if surgery is supplemented with nitrogen mustard and/or roentgen therapy, at the time of recurrence of the disease.

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Annular Pancreas

David A. Hull, M.D., F.A.C.S.
Lexington, Ky.

ANNULAR pancreas, first recognized in 1862, has been reported with increasing frequency in the past few years. A total of approximately 96 cases has been reported through 1955, 67 of these having been reported since 1950. This increase in recent years is a result of an awareness of the condition and availability of roentgenologic examination. Only a small percentage of these cases treated surgically were correctly diagnosed preoperatively. Because of the infrequency with which one encounters this condition, the reporting of a case of annular pancreas, diagnosed preoperatively and successfully treated, would seem to be of interest.

Case Report

The patient was a 30-year-old white male who for two and one half years prior to examination experienced bouts of epigastric pain relieved by the ingestion of milk or alkali and associated with nausea and vomiting. During this period the patient had been on an ulcer regime which he intermittently disregarded, only to notice a recurrence of symptoms. During the present illness the patient was known to have vomited blood on four separate occasions. Once the amount measured approximately one pint and on two other occasions was only "streaks of blood." The most recent episode of hematemesis had occurred approximately one week prior to admission to the hospital. He was treated by his local physician with three blood transfusions at this time and referred for possible surgery. An interesting sidelight to the history was gross intolerance to fried and fatty foods and the history of jaundice on two previous occasions. However, this latter history was not substantiated by a physician. The patient stated that his family and friends told him he had "yellow jaundice." Both of these episodes of "jaundice" were associated with an acute exacerbation of epigastric and upper abdominal pain.

The past history and family history were not significant.

Physical examination revealed a well developed, well nourished, white male in no acute distress. BP 138/72, pulse 72, respirations 24. The sclera were not icteric and the skin showed no evidence of jaundice. There was two plus epigastric and right upper abdominal tenderness and spasm. No masses were palpable. Red blood cell count was 5,250,000 with 15.5 gm hemoglobin. Icteric index on admission was 15 units and 48 hours later 9.5 units. The thymol turbidity was 2 units. Cholecystogram revealed a normally functioning gallbladder. Gastric analysis revealed total acidity of 62° and free HCL 36°. The specimen was positive for blood. Upper G-1 series was reported as showing "a constant constriction deformity of the second portion of the duodenum just below the apex of the cap and thought to be consistent with an ulcer deformity." Re-examination of the stomach and duodenum showed the same deformity in the descending loop of the duodenum. At this re-examination it was believed that this represented an ulcer deformity, extrinsic pressure from a pancreatic ring was also considered as a possibility.

In view of the deformity noted on x-rays and the history of four previous bouts of hematemesis, surgical exploration was deemed advisable. The preoperative diagnosis was duodenal ulcer deformity or annular pancreas. The abdomen was entered through a bilateral subcostal rectus dividing incision. The right upper quadrant was found to contain densely adherent old and recent adhesions. The pyloric end of the stomach and first and second portions of the duodenum were markedly distorted, being attached to the inferior surface of the liver. Mobilization of the duodenum was difficult and tedious. Upon completion of the exposure an annular pancreas was found encircling the midportion of the second part of the duodenum. There was a 1cm duodenal ulcer located on the anterior wall of the duodenum just distal to the pylorus and proximal to the annular pancreas. Although a subtotal gastrectomy was initially considered to be the indicated procedure, the difficulty in ascertaining the exact nature of the pathology present and the duration of the anesthestic to this point, prohibited performing a gastrectomy. A gastroenterostomy and vagotomy was chosen as the alternative. A bilateral sub-diaphragmatic vagotomy was performed by dividing the vagi between clamps

and ligating them with 3-0 black silk. A posterior gastrojejunostomy was then performed. The anastomosis, upon completion, admitted three fingers. The abdomen was closed and the condition of the patient was noted to be satisfactory.

The patient was placed on continuous gastric suction, nothing by mouth and supported with intravenous feedings of 5% glucose in distilled water and normal saline. Potassium chloride and parenteral vitamins were added to the intravenous solutions as needed. Pain was controlled with morphine sulfate gr. 1/6 every four hours as needed and a mixture of penicillin and streptomycin was given daily. The patient was made ambulatory on the first postoperative day. His general condition remained satisfactory on the first and second postoperative day and on the third postoperative day the levine tube was clamped, which he tolerated well. On the fourth postoperative day the levine tube was removed and the patient was given surgical liquids by mouth as tolerated. Oral intake was increased, so that on the sixth postoperative day the patient was taking soft solid foods in small, frequent feedings. The skin sutures were removed on the seventh postoperative day and the patient was discharged from the hospital on the tenth postoperative day.

Approximately four months following surgery the patient was found to be completely satisfied with the operation. A weight gain of eight pounds since surgery was noted. Gastric analysis revealed a total acidity of 7° and no free HCL on the fasting specimen. After stimulation with histamine the total acidity was 26° and the free HCL 6°. Upper gastrointestinal x-rays at this time revealed no evidence of a marginal or jejunal ulcer and the annular constriction of the second part of the duodenum was again noted. Repeated attempts to have the patient return for re-evaluation since that time have been unsuccessful.

Discussion

In 1933 McNaught[11] summarized forty cases of annular pancreas reported in the literature to that date. Stofer[17] in 1944 added seven additional cases and in the period from 1944 to 1951, thirteen additional cases were recorded. Conroy and Woelfe[5] reported two cases in 1951. Ohlmacher and Marshall[13] in 1950, Payne, Wakeley, Brickford and Williamson[2] each report one case of annular pancreas. Whelan and Hamilton[19] note that 67 cases have been reported since 1950 and 47 since 1952.[10] Through 1955 approximately 93 cases have been reported.

The embryological theory which is generally accepted as explaining presence of an annular pancreas, proposes that this anomaly results from incomplete migration of the ventral anlage of the pancreas. The dorsal anlage forms the body, the tail, part of the head and uncinate process. The ventral anlage contributes to the head. The ventral duct joins with the dorsal duct to form the duct of Wirsung and the proximal dorsal duct forms the duct of Santorini. The two outgrowths of pancreatic tissue extending around the second part of the duodenum contribute to the formation of the annular pancreas. These two projections fuse, thus completely encircling the duodenum. If fusion is incomplete, the defect is on the anterior surface of the duodenum. Histologically, the annular portion of the pancreas consists of normal pancreatic tissue. Most commonly the annular portion of the gland is traversed by a major duct possessing a duct system of its own. This duct starts on the anterior surface, goes posteriorly to enter the main pancreatic duct or enter at a separate point in the common duct.

Pathological Changes

Pathological changes in the annular portion of the pancreas consist chiefly of chronic pancreatitis. Brines[3] has reported an incidence of hemorrhagic pancreatitis complicating an annular pancreas in which the entire gland, including the annular portion, was involved with inflammation.

Secondary changes in the upper gastrointestinal tract are produced by the obstructive phenomena, resulting from the constricted duodenum. Secondary ulceration, stasis, edema of the proximal duodenum, acute and chronic gastritis may develop. Duodenal ulcer associated with an annular pancreas has been noted. Such was the condition in the case presented. Complications may arise from the ulcer. In this case, the patient was found to have an associated duodenal ulcer which had bled four times previously. Biliary obstruction secondary to the anomaly of an annular pancreas has been reported. Anderson[1] in 1951 reported a case in which the presenting symptom was that of jaundice and was relieved by cutting the annular ring. Although there was a history of two pre-

vious episodes of jaundice in the present case, this was not confirmed by another physician nor substantiated by the laboratory. Other associated congenital anomalies may exist. McNaught and Cox[12] estimate that 25 per cent of the cases exhibited associated anomalies in other portions of the body. Gross and Chisholm[6] describe a case in which an accompanying malrotation of the gut was noted. In infancy, associated anomalies are more frequently encountered.

Being a congenital anomaly the major proportion of the reported cases have been noted in children. Until recent years, cases appearing in the medical literature consisted chiefly of reports of an annular pancreas found at necropsy. In many instances there are no significant symptoms relating to the pancreatic lesion and it is found as an incidental finding at autopsy. When present, duodenal obstruction promotes the symptoms of nausea and vomiting, abdominal pain and weight loss. Symptoms related to ulceration of the duodenum may be present if there is an associated duodenal ulcer proximal to the point of obstruction. The onset of symptoms may occur immediately after birth and in such instances the annular pancreas is associated with extreme narrowing or complete atresia of the involved portion of the duodenum. A large percentage of cases however go into the adult stages of life without significant symptomatology.

Diagnosis

The diagnosis of an annular pancreas is dependent chiefly on roentogenological studies of the upper gastrointestinal tract. An awareness of the condition has brought forth the correct preoperative diagnosis more frequently, as evidenced by the fact that of 26 reported cases treated surgically, 12 have been reported since 1950 and 18 since 1940.[16] Lehman[8] reported a case in 1942 and subsequently added two more cases in which the preoperative diagnosis was made. Conroy and Woelfe[5] in 1951 noted that 58 cases of annular pancreas had been reported in the literature with the preoperative diagnosis correctly made in 3 cases brought to surgery. Ravitch and Woods[15] in 1950 reported a case in which they made a correct preoperative diagnosis as did Heden[7] in 1950. The diagnosis was strongly suspected in the case presented here. A prerequisite to a more accurate diagnosis is the routine consideration of this anomaly in all cases of dilation of the first part and constriction of the second portion of the duodenum. The ability to recognize the deformity at the time of abdominal exploration depends upon careful exposure of the entire duodenum in all instances of obstruction of the duodenum. Cattell and Warren[4] observed that the pancreatic anomaly was overlooked at the operating table in four of eleven patients subjected to surgery. In several other instances in which operation was performed, the true nature of the lesion was revealed with difficulty.

Treatment

In the non-symptomatic case, no treatment is indicated for this anomaly. Varying degrees of duodenal obstruction necessitate the surgical relief of this complication. Surgical therapy may be thought of as being along two lines, direct attack on the annular portion of the gland or a by-passing operation. Division of the annular, constricting portion of the pancreas has been proved to be an effective way of alleviating the obstruction. However, pancreatic duct injury, failure to relieve the obstruction because of an associated duodenal stenosis and the possibility of a pancreatic fistula are the chief reasons why the direct atttack on the annular pancreas has fallen into disrepute. Wakeley[18] in 1951 noted that the band of pancreatic tissue surrounding the duodenum may consist of a thin or thick band of pancreatic tissue. In the former case he believes that the direct attack upon the constricting portion should be done and those patients with a thick annular constriction should have a bypassing operation. Cross and Chisholm[6] first pointed out that division of the ring was inferior to a bypassing operation. This has led others to advocate the bypassing operation for all cases of annular pancreas. Chief among these proponents are Cattell and Warren,[4] Payne,[14] Ravitch and Woods.[15] Duodenojejunostomy appears to be the least hazardous and most effective way of bypassing the constricting portion. This has been utilized by Gross and Chisholm[16] and Cattell and Warren.[4] Gastroenterostomy may be employed but theoretically this is less adequate than the duodenojejunostomy because of the blind loop proximal to the constricting annular pancreas. Subtotal gastrectomy is thought to be the operation of choice when peptic ulceration is associated with an annular pancreas, although other, less formidable procedures, have been effectively utilized. The treatment when a duodenal ulcer complicates an annular

pancreas should be considered two fold; surgical relief of the annual pancreas and definitive treatment of the duodenal ulcer. It is for these reasons that gastrectomy, with or without vagotomy has been advocated for treatment of this condition. Subtotal gastric resection was initially planned on the reported patient, however because of the difficulty with the technical aspects of the operation a vagotomy and gastroenterostomy were substituted and appear to have effectively relieved the condition.

Summary

The history, embryology, pathology, symptomatology, diagnosis and treatment of annular pancreas is reviewed. A case of annular pancreas in which an associated duodenal ulcer was present is reported. The surgical correction of this condition was accomplished by a vagotomy and gastroenterostomy.

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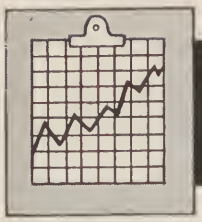
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CASE DISCUSSIONS
From The
University of Louisville Hospitals



Depression, With Alcoholism The Presenting Symptom

Louisville General Hospital

Presentation by Patircia Haig, M.D., Senior Resident in Psychiatry

G. F. is a 50-year-old, white, married female, who was brought to the Louisville General Hospital by her husband because of her recent excessive use of alcohol and evasion of responsibilites. The immediate cause of admission was that her teen-age daughter had returned home at 4 in the afternoon with two schoolmates and had found her mother passed out in the middle of the living room floor. The family history apparently contributes little to our understanding of the case, other than the fact that the patient's maternal grandfather was a suicide at the age of 45. No other facts are known concerning his death.

Previous history showed the patient to have had the usual diseases of childhood without sequelae. There were no postchildhood diseases other than an occasional bout of tonsillitis. She was described as always being a hard working, conscientious, dependable and outgoing person with many friends. She had been married 25 years and was the mother of four children, all of whom were in good health and two of whom were still at home attending school. Apparently, her marriage had been quite happy. There were no known difficulties and they had many mutual interests. She and her husband, ever since their marriage, had done a degree of social drinking. On rare occasions they would drink a little more than they should, but this never interfered with either's functions nor resulted in any unpleasantness.

Although it was difficult for the family to date the onset of this current problem, they felt that it went back to about a year ago, at which time the patient complained of sleeping poorly and of having a poor appetite. She had gone to see her private physician, who gave her a tranquilizer and put her on some vitamins. In spite of these measures, she continued much the same, awakening early in the morning and just generally not feeling well, but finding her daily chores to be an increasing burden. Her husband said that some six or eight months ago he believed that on occasions when he would come home from work he could smell whiskey on his wife's breath. Occasionally, when he would ask her about this, she would say that some girl friend had dropped by and that they had had a drink. This, he said, would not have been too unusual but he noticed that it began to occur more frequently.

He then said that approximately four months age he felt that most of the time when he returned home she would have had something to drink, but often would deny that it was anything more than one small drink. He said then that sometime during this period he noticed that she had begun to drink more than she had previously in the evenings and contrary to her usual experience after dinner in the evenings she would take two or three or more drinks, stating that this allowed her to sleep.

Finally, in the past two months he said that it became quite obvious that she was drinking every day and on at least two occasions when he had come home she had been so drunk that she was practically inarticulate and so he simply put her to bed and prepared supper for himself and the children. The first time that she had completely passed out was the day of admission, when her daughter came in with her teen-age friends, and, because of the condition of the mother, it was thought best to bring her to the hospital.

Physical Examination

On admission she was quite drunk and rather inarticulate. Her temperature was 99^6, pulse 120, and respiration 16. Aside from this, the only other abnormality of the physical examination was a slightly palpable liver. A repeat physical examination, after she had come out from the influence of alcohol, showed no physical abnormalities, no jaundice, or any other findings than the slightly enlarged liver. At this time, when she had cleared, her mental

status revealed a chronically depressed individual with all the classical symptoms of a Manic Depressive Psychosis, Depressed Phase; namely, depression, sleeplessness, self-blame, suicidal preoccupation, constipation, loss of appetite, and loss of weight.

After it was determined that this was the basic disability, she was given a series of electric shock treatments, which, in her case, consisted of 8 given on alternate days. The liver gradually receded, her liver function test did not show any definite disability, and at the end of three and a half weeks she was discharged from the hospital. By that time she had begun to eat again, was sleeping well, was putting on weight, her spirits were definitely lifted, and she returned to take her place in the home. A follow-up on this patient shows that she is again drinking on a socially acceptable basis in her milieu and having no further difficulty with alcohol. She is maintaining her home and her responsibilities, and once again the family is functioning as it did before her depression occurred.

Discussion

Louis M. Foltz, M.D., Associate Professor of Psychiatry—This is the type of case that could so easily be overlooked and labeled as an alcoholic, if an accurate history were not obtained. The average physician in his daily practice sees so many alcoholics that, as soon as the patient comes in with a presenting symptom of alcoholism, his natural reaction is to feel that this is another chronic alcoholic and treat it as such, without looking further or deeper for causative factors. It also points up one of the things that we often say about alcoholics but can rarely show evidence of, that there is a cause underlying the patient's drinking to excess.

We frequently have occasion to examine the depressive type patient who has another symptom as the presenting one. These symptoms might be somatic complaints, such as digestive upsets, headaches or generalized muscle aching and personality changes. The average physician's routine will find with notable frequency patients who present physical symptoms as an expression of an early or mild depressive reaction. Such cases, as in this case, may be slowed physically and mentally, be insomniac, have poor appetite, loss of interest. But also, as in this case, these will be of only minor importance to the patient. When these patients are treated for such conditions with usual symptomatic forms of therapy they do not improve, but they do show marked response and improvement with electric shock therapy.

F. M. Gaines, M.D., Associate Professor of Psychiatry—In this case two important points are illustrated to me. First is the recognition of the alcoholism as an unusual and uncharacteristic pattern of behavior for this particular patient, and, secondly, the importance of a diagnostic investigation after the effects of alcohol have disappeared. Depressions, the diagnosis of which are obscured by alcohol or drugs, are common enough to be kept in mind by all physicians. In Diethelm's book on the "Etiology of Chronic Alcoholism," he says that 6.8% of chronic alcoholics are suffering from manic depressive reactions and that an additional 6.8% are suffering from what he calls middle and late life depressions.

Hollis Johnson, M.D., Assistant Professor of Psychiatry — This patient's family was perplexed by the change in her behavior and suspected, as many do under these circumstances, that she had become a drunk. The reason for her admission to the hospital at this time was more her daughter's embarrassment about her drunkenness than concern for her depressed mood and self-depreciation. The pertinent points in the history are insomnia, loss of appetite, and early morning awakening which is almost pathognomic of depression. After these had developed, the other symptoms were clouded by her almost constant state of intoxication, but did become apparent when the alcohol was removed.

The excessive use of alcohol is a factor in ten to twenty per cent of psychiatric hospital admissions, and a surprising number of these are not alcoholics. Barbiturates as well as alcohol may be used by depressed patients in an attempt to obtain relief from their intense symptoms. This is much less frequent in our "tranquilizer age" than it was a few years ago. Like alcohol, barbiturates and tranquilizers or ataratics afford only temporary relief from depression if any at all.

We commonly think of excessive use of alcohol as a symptom and in this case it truly was. In the alcoholic it is a symptom which attains disease significance, the use of alcohol itself becoming the primary problem. The alcoholic cannot return to social drinking as this patient was able to do after recovery from her depression.

SPECIAL ARTICLES

Medicine Accepts A Challenge*

WOODFORD B. TROUTMAN, M.D.
Louisville, Ky.

I MAY be unwise to tackle such a problem as I am about to present but my enthusiasm is high and if this small voice in the wilderness can get just a few of you to see it as I do, I count the mission accomplished. Also I want it specifically understood I seek no personal gain, have no political ambitions and do not speak for or against either political party.

You may have noticed in "Sparks"; I became a Doctor of Medicine in 1921 and in the more than thirty-five years which have transpired have had many interesting experiences. In my earliest years I did some general practice, then a few years in industrial medicine before entering my specialty. I may not have accomplished a great deal but I have made many observations and gained many definite opinions from my patients especially as to what they think of our system of medicine and how they want to be cared for.

The Golden Age

Just three weeks ago you heard Dr. Landis from this platform on the subject "Retirement —The Golden Age." My remarks also deal with the aged but I would quickly remind you 'all is not gold that glitters'. Just two weeks ago another speaker passed a chart among you showing the tremendous changes taking place in our population in the short space of forty years and especially the great increase percentage-wise in the aged.

This points up one very important fact; one of the pitfalls we *must* avoid is trying to solve today's problems with yesterday's statistics.

There is no valid reason why old age should not be the best years of human existence; yet, at the federal level I fear that millions of our aged are being shelved as a surplus commodity.

Since improved medical and hospital care have increased life expectancy those of us in the field of health care must accept the responsibility for enriching the lives of those people whom we have enabled to live longer. We want and intend to accept this challenge and I can tell you that already the Hospital Administrators of America, the Nursing Home Administrators and Proprietors, the Dentists and Physicians through their respective Associations have pooled all their vast body of knowledge, talent and resources to form the "Joint Council to Improve the Health Care of the Aged."

Local Projects

The Joint Council will work to bring into being more medical facilities with costs tailored to the limited means of the aged. It will counsel with the Insurance industry and the Blue Cross and Blue Shield to make more and better health insurance coverage available to oldsters.

To speak of some specific local projects; in the past few years one of our civic-minded citizens invested in a large building near Floyd and Walnut Streets which I believe formerly was occupied by one of our City agencies and converted this building into 'Ann's Rest Home'. I have visited many patients there and they receive good attention and get good care. Only a year or so ago one of our Doctors opened the Old Jewish Hospital as a nursing home and it is meeting a need. All of the time we see many other such places opening in this area. We have just completed a drive with your very generous help which will add about three hundred additional and badly needed hospital beds; the beautiful Methodist-Evangelical Hospital which will soon be under construction at Floyd and Broadway.

**An address given by Dr. Troutman, KSMA secretary and treasurer, at a meeting of the Louisville Rotary Club at the Brown Hotel on May 8.*

A recent nation-wide survey indicates that the availability of health care protection for retired workers has more than doubled in the last four years; enrollment of about 100 million people within the brief span of twenty years is one of the most remarkable phenomena in the history of American Medicine and the Insurance Industry. Six million of these are over sixty-five.

The council has adopted a broad program. Its primary goal must be to eliminate the handicaps that attend the elderly. Its efforts are aimed at bringing about a healthy, dignified and useful old age for our senior population.

The Joint Council will depend heavily on local action, on community service agencies, and on the individual for its success. We need first to explore ways to bring better health care to our aged who are ill. Visiting nurse, home-maker and home care services at the community level are vitally needed so that the chronically ill aged can be properly cared for in surroundings best suited to their care—at home or in facilities near home and loved ones.

A Positive Approach

Second, we need to revise our thinking about the aged, whom a fast-paced and youth-oriented society has prematurely handed the rocking chair. The prevalence of this attitude, and the ill-considered acceptance of compulsory retirement during the productive years, probably are the chief underlying factors in a majority of the disabling illnesses of our senior citizens.

The Joint Council and its members have adopted a positive, optimistic approach to the problem. We refuse to accept the disabilities of senescence as inevitable and unavoidable.

We feel we should offer the aged hope for a better life; not a crutch. We should offer them a return to their rightful position in the family and the community. We should offer them a return to usefulness and self-respect; not a one-way trip to isolation and limbo.

Now I must speak briefly and with some criticism of thinking at the national level; a bill is soon to have hearings in Washington which would provide hospital and medical care for about 13 million social security claimants by amending the Social Security Act. It would bring the aged under government-controlled and supervised health care; it would limit the choice of hospitals and physicians. One thing our past experience has taught us is that more hospitalization for more people is no solution to any problem. There are many people in our general hospitals today who would be far better off, at one-third to one-half the cost, in nursing homes, domiciliary homes or in their own homes; if community home-care programs were available that were tailored to their needs.

We have found that we cannot separate the ills of the aged from the patient's social and family life. Our over-all cures are most likely to be found in the betterment of life conditions for our aged, than they are in any specific curative medicines, physical therapy or prolonged hospitalization.

This bill would eventually destroy private health insurance and Blue Cross and Blue Shield plans.

It is an attempt to solve a complicated health problem by political means rather than through established medical resources.

It would mean higher taxes and less take-home pay for all wage-earners for the benefit of a minority.

Over-utilization of hospitals by social security claimants would limit the number of beds available for the acutely ill of all ages in the community.

Provisions for extensive free hospitalization would create a needless and dangerous crowding of hospital space.

It could bankrupt the entire Social Security Program and jeopardize the retirement income of millions of Americans.

As to the cost, I must again remind you of the pitfall of using today's statistics in projection of a figure; while the population of our nation has about doubled in the last quarter century, the number of senior citizens has increased four-fold and may quadruple again in twenty-five years. The average man of sixty-five now has a 50-50 chance of reaching age eighty, the average woman of sixty-five will survive to age eighty-five. By 1975 one in ten Americans will be sixty-five or over. Instead of 15 million citizens over sixty-five as today, we can expect an estimated 22.5 million. Just try to imagine the staggering cost of such a program.

I must add a few personal observations; I saw State Medicine almost in its infancy operating in Vienna while there for a year of postgraduate study in 1929. The doctor was starving and the patient getting little or no

care. You may ask how I got my education. Well, they had wonderful pathologists and I stood by at the post-mortem table and saw the results of disease. I learned something about how to take care of people when I returned to the States. I have observed the systems of medical care in England and also Sweden; you really have to be in real distress to get hospital accommodations, otherwise you may go on the waiting list for weeks or even months. In India I saw a government medical clinic in operation. This was awful—simply a shed on the side of a street and patients herded through like animals.

Solving the Problem

The Joint Council to improve the health care of the aged wishes the patient to remain under the care of his personal physician and I firmly believe the American people want it to remain that way.

Through the Joint Council, the American Nursing Home Association and other interested organizations are seeking better ways to finance additional nursing home construction and to remodel existing nursing homes to meet upgraded standards. Minimum standards also are being studied for such homes, to apply eventually on a nationwide basis.

Another problem is that of recognition by state and local legislative bodies of the necessity for adequately financing health needs of older persons who do not have the ability to pay.

While some states have made progress toward a program of adequate payments for health services to the needy of all ages, many states are not accepting their full responsibility for providing the full cost of such care and services.

In The Lead

The Joint Council has taken the lead in propounding a new doctrine of hope for our elderly citizens. It is up to the members of the Joint Council to see that the aged receive the same concentration of research, investigation and cooperation that brought under control the polio, tuberculosis and other grave health problems of the past.

Victory is within our means, but the battleground is not entirely in the laboratory nor in the hosptials, but in the lives of every one of us. There must be action at the community level, and most important, by the individual and his family.

At The Crossroads

Today our aged stand at the crossroads. In one direction lie dependency, boredom, deterioration—the rocking chair. In the other direction lie social usefulness, continued growth, and self-respect.

My wife's mother died in the past year at the age of ninty-five after three years in a nursing home in a little town in northern Minnesota. I know she was happy there with people near her age and her own doctor in the little town calling on her. I visited this home two or three times; it was clean, they served good food and it was operated by the minister and his wife. In 1952 in the outskirts of Oslo, Norway, I saw long lines of single-floor apartment-like dwellings, and outside many of these would be an elderly couple; working in their garden, hanging out clothes or just sitting and visiting. I was told these were furnished by the State at a very low rental and these people were happy in their own little home. I believe something of this nature is going on in Florida now and why not right here in our own City?

Both for a useful life and for rehabilitation, the aged need continued wholesome industry and recreation. Five billion dollars a year in national production is lost because we do not provide work for those over sixty-five who want it. This is a problem which calls for some soul-searching by all of us.

A Curse or a Blessing?

Finally, old age should not be a curse, it should be a fulfillment—the harvest years when wisdom pays its most generous dividends. To that end, the Joint Council to Improve the Health Care of the Aged pledges its best concerted efforts and its enlightened leadership. With the help of America's deep reservoir of community leadership and public service institutions; we can greatly enrich the lives of the elderly and ultimately, all of us.

Medicine Accepts this Challenge!

In conclusion, I leave you with this adage; life should be two-dimensional; it should have breadth as well as length.

EDITORIALS

World Congress

AS if we did not have enough medical conventions — and perhaps too many — already, a new type has developed and grown rapidly during the past ten years or at least since the war—the World Congress in this, that or the other specialty. Our first reaction, shared perhaps by many other physicians, was that this type of convention is just so much extra baggage to be patronized only as an excuse to travel outside the United States, with the distinct tax exempt advantage; and indeed that would be reason enough. But like every other commodity it has developed that there is always room for more of the same kind so long as it is better, fulfills a genuinely useful function, and finds or creates a demand. It appears that the World Congress has met these requirements and is here to stay.

Wendell Wilkie popularized the idea of "one world." In medicine that concept has grown. Always the discoveries and new developments in medicine have been shared freely and unselfishly with the whole world as soon as their usefulness has been established. So rapidly have new techniques and modalities of diagnosis and treatment been found during the last two decades, and so significant have they been that the leaders of our profession the world over have sought to facilitate the dissemination and pooling of such knowledge for the benefit of all mankind.

What new was learned regarding the better management of infectious diseases in England, or of eye surgery in India, or of hepatitis in Chile last month must become a part of our armamentarium this week, and the rest of the world is as eager to learn of our advances. There is no question but that learning is better accomplished by personal contact and free exchange of ideas first hand than by written reports and descriptions. The World Congress therefore becomes eminently useful and practical as a medium of exchange, and entirely in keeping with the tempo of the present generation.

While the successful care of the individual patient requires ready and accurate knowledge of his present illness and the means available for its treatment, a broad and comprehensive view of the disease which affects him and of its management is necessary if the attending physician is to be as resourceful as he should be. Such breadth of knowledge can only be acquired by experience and a fair acquisition of the general fund of information painstakingly gathered by his colleagues. The means of acquiring a broader concept of disease and a wider horizon regarding its treatment is more readily available to us now than ever before.

SAM A. OVERSTREET, M.D.

Opinions expressed in contributions to The Journal are those of the writers and do not necessarily reflect the views of the Kentucky State Medical Association.

ORGANIZATION SECTION

Information on Guest Speakers Released by Dr. Mersch

Information on three physicians who will participate in the general session of the 1958 KSMA Annual Meeting has recently been received by the Committee on Scientific Assembly and Arrangements, headed by Edward B. Mersch, M.D., Covington.

Three of the 13 specialty groups participating in the meeting which have recently given biographical information on guest speakers to the Committee are the Kentucky Obstetrical and Gynecologic Society, the Kentucky Orthopaedic Society, and the Kentucky Chapter, American College of Surgeons.

Frank R. Lock, M.D., professor of obstetrics and gynecology at Bowman Gray School of Medicine and director of obstetrics and gynecology at North Carolina Baptist Hospital, will moderate a panel on "The Pregnant Patient" at 9 a.m. on September 23. Guest of the Kentucky Obstetrical and Gynecologic Society, he will also speak on "Spontaneous and Habitual Abortion" before the general session that afternoon. At the specialty group session his topic will be "Indications for Operative Treatment in Gynecology."



Dr. Lock

Guest of the Kentucky Orthopaedic Society will be George J. Garceau, M.D., Indianapolis, who is professor and chairman of the department of orthopaedic surgery at Indiana University School of Medicine. He will participate in a panel on "Geriatrics and Surgery," moderated by Arnold Griswold, M.D., Louisville, on Thursday, September 25, at 2 p.m. The topic of his talk before the specialty group had not been announced at press time.



Dr. Garceau

Another participant on the panel on "Geriatrics and Surgery" on Thursday, September 25 will be James Forsee, Brigadier General, Medical Corps, U. S. Army. A graduate of the University of Missouri Medical School in 1927, General Forsee will be the guest of the Kentucky Chapter, American College of Surgeons. He is the author of a book entitled, "The Surgical Treatment of Pulmonary Tuberculosis" and has had more than 80 scientific articles published in U. S. and foreign journals. His subject for discussion before the specialty group will be "Closed Chest Injuries—Recognition and Management."



Gen. Forsee

All Members Invited to Attend Council's Open Meeting

All interested KSMA members are invited to attend the open meeting of the Council in the South Room of the Brown Hotel in Louisville on Thursday, July 31.

Walter L. O'Nan, M.D., Henderson, chairman of the Council, in making the announcement, expressed the hope that KSMA members would show their interest in the workings of their policy making body by attending the meeting.

Last year the Council accepted the recommendation of 1957 KSMA president Richard Slucher, M.D., Buechel, that such an open meeting be held annually.

Rural Scholarship Board Grants New Loans to 28

Twenty-eight future doctors from 20 Kentucky counties and two states were added to the Rural Kentucky Medical Scholarship Fund roster at the meeting of its Board of Trustees on May 22. According to an announcement from C. C. Howard, M.D., Glasgow, chairman of the Board, this is the largest number ever to be accepted by the Board in one year.

The Fund, which is sponsored by the KSMA, is aimed at distributing adequate medical care to rural Kentuckians, and, at the same time, helping worthy students interested in rural practice to gain a medical education.

Since its inception in 1946, it has aided 137 students with 335 loans amounting to nearly $257,000. At the present time, 22 of the recipients are fulfilling their obligations to the Fund by practicing in rural



The Board of Trustees of the Rural Kentucky Medical Scholarship Fund meeting in Louisville on May 22 voted to grant loans to the 28 future physicians pictured above. The recipients include 24 prospective freshmen, three sophomores, and one junior.

Kentucky areas, 14 are continuing their practice after fulfilling their obligations, 14 are in the service and will complete their obligations later, 13 are completing internships and residencies, and 47 are in medical schools.

Seventeen prospective freshmen at the University of Louisville Medical School, two from Bowman Gray School of Medicine, and one from the University of Cincinnati Medical School, Meharry Medical College, the University of Tennessee, Vanderbilt University School of Medicine, and Wayne University College of Medicine, were among the new recipients. Two new sophomore recipients are attending the University of Louisville and one Howard University. The Junior recipient is at the U of L School of Medicine.

Each of the new loans, amounting to approximately $900 each for the coming school year, is renewable in future years if the recipient continues to qualify.

Students who agree to practice in the ten "critical" counties most in need of doctors, will be credited with repayment of the loan for each year they spend in the location. All others must spend a year in rural practice for each year they receive a loan and must begin repayment three years after graduation.

New Magazine for Youth Published

"The Young Rural Kentukian"—a monthly magazine dedicated to the youth of the State—started publication in June. A KSMA member Donald L. Graves, M.D., Frenchburg, is on the editorial Board as vice president.

Aimed at highlighting the opportunities for a full and wholesome life in rural Kentucky, as well as recognizing the achievements of youth, the magazine has as editor and president, Jerry F. Ringo, Frenchburg. A one year subscription is one dollar. Subscriptions should be mailed to Circulation Manager, The Young Rural Kentuckian, Frenchburg, Kentucky.

KSARN Appoints Nellie B. Weller As Executive Secretary

Nellie B. Weller, R. N., who was appointed by the Board of Directors of the Kentucky State Association of Registered Nurses as KSARN executive secretary, took over her new duties on June 1.

Miss Weller holds a Masters Degree in Nursing Education from Nazareth College in Louisville. She succeeds Cynthia N. Warren, whose resignation became effective on March 31. Since 1952, Miss Weller has been in the field of nursing education. Most recently, she has been instructing at Nazareth.

She has been serving the KSARN as chairman of the Committee on Legislation and in 1956 was the advisor of the Kentucky State Association of Student Nurses.

Wm. McGlothlin to Speak at Dinner for U of L Alumni

William J. McGlothlin, who will become a vice president of the U of L in September, will be featured speaker at the annual Alumni Dinner which will be held Thursday, September 25, in the Crystal Ballroom of the Brown Hotel.

Immediately before the dinner the Medical School faculty will hold its annual cocktail party for alumni in the South Room of the Hotel, according to Leslie Shively, director of the University's alumni relations, who announced the reunions, which will be held in conjunction with the KSMA Annual Meeting.

This year marks the 50 year reunion for the class of 1908 and the 25th for the class of 1933. Other classes celebrating under the "five year plan" are 1913, 1918, 1923, 1928, 1943, 1948, and 1953.

Names of the various reunion chairmen and full details on the dinner will be announced in the August Journal in the Annual Meeting Section. All alumni are urged to return for the reunion and at the same time plan to attend the scientific sessions of the Annual Meeting.

Dr. Gundersen Takes Oath of Office As AMA's 112th President

The obligations of the physician on the international scene were stressed by Gunnar Gundersen, M.D., LaCrosse, Wisconsin, as he became the 112th president of the American Medical Association on June 24.



"As both physicians and citizens," he said, "we must see that medicine plays its full role, not only in promoting better world health, but also in helping the search for brotherhood and peace." Doctor Gundersen who will be remembered by many KSMA members for his address at the 1958 County Society Officers Conference, also said, "Medicine, like religion, speaks a universal language which passes all barriers of race, creed, color and nationality."

Doctor Gundersen, who operates the Gundersen Clinic in LaCrosse with three physician brothers, has been active in medical affairs, both on the state and national level. He is a past president of the State Medical Society of Wisconsin and past speaker of its House of Delegates. He was a member of the AMA House of Delegates in 1937-38 and was elected to the AMA Board of Trustees in 1948, becoming Board Chairman in 1955. Doctor Gundersen was the first chairman of the Joint Commission on Accreditation of Hospitals and served in that capacity until 1953.

AMA Meeting in San Francisco Attended by 15,000

An estimated 15,000 physicians were scheduled to attend the 107th annual meeting of the American Medical Association in San Francisco from June 23-27, as the Journal went to press.

Presentation of 500 scientific papers, 325 scientific exhibits, 285 technical exhibits, and 16 hours of color television showing surgical procedures were slated to give busy physicians a chance to catch up on the hundreds of new aspects in the rapidly changing medical world.

One of the television programs was a 90-minute closed circuit Grand Rounds which was viewed by physicians in seven cities—including Boston, Chicago, Cleveland, Kalamazoo, Philadelphia, New York, and Syracuse.

Highlights of the meeting were to be the selection of the 21st winner of the Distinguished Service Award for contributions to medical progress, the inauguration of Gunnar Gundersen, M.D., LaCrosse, Wisconsin, as successor to outgoing President David B. Allman, M.D., Atlantic City, New Jersey, and the election of a president-elect who will be inaugurated as president in 1959.

This is the ninth year the AMA meeting—largest medical meeting in the world—has been held in San Francisco. The first meeting there was in 1871.

Others besides practicing physicians attending included, residents, interns, nurses, technicians, students, and physicians' wives.

Hill-Burton Funds Allotted to UK for Medical School

About $8 million dollars in Federal hospital construction funds allocated to Kentucky under the Hill-Burton Act for the next three years will go to the new Albert B. Chandler Medical Center at the University of Kentucky.

According to an announcement from the State Department of Health, the money will be used by the University to build a science building, hospital, nursing school and other facilities. The money was allocated by the State Hospital Advisory Council with the approval of the Health Department.

A total of from $9½ to $10 million is expected to be allocated to Kentucky in the three-year period under the Hill-Burton Act. In the event that emergencies should arise elsewhere, the funds for the UK would, in all probability be given over a five-year period, instead of three.

Dr. Kornhauser Retires June 30 As U of L Dept. Head

Sidney I. Kornhauser, Ph.D., retired as head of the anatomy department of the University of Louisville School of Medicine after 36 years in that position, on June 30.

Doctor Kornhauser, who is celebrating the golden anniversary of his graduation from the University of Louisville, was guest of honor at a banquet given by Phi Delta Epsilon Graduate Club at Bowman Field on June 2.

He came to the U of L as head of the anatomy department in 1922 after serving as an instructor in biology at George Washington University, and Austin Teaching Fellow at Harvard University, and assistant professor of zoology at Northwestern University. He will continue at the U of L as a professor in the anatomy department.

Ninth District Meeting Scheduled For July 1 in Maysville

KSMA president Edward B. Mersch, M.D., Covington, was scheduled to address the members of the Ninth Councilor District at their annual meeting at the Maysville Country Club on Tuesday, July 1.

Announcement of the meeting, which was scheduled to take place as the Journal went to press, was made by J. M. Stevenson, M.D., Brooksville, councilor for the 9th District. The Mason County Medical Society, of which William H. Sewell, M.D., is president, will be the host group.

Physicians who were to take part in the scientific program were: Herbert Clay, M.D., Thomas Giannini, M.D., and William E. Pugh, M.D., all members of the University of Louisville Medical School faculty. The program has been approved for Category I credit for KAGP members.

Dr. Towery Named Outstanding Prof. By Student Vote

Beverly T. Towery, M.D., chairman and professor of the department of medicine at the University of Louisville Medical School was voted by students as the school's outstanding clinical professor. Doctor Towery serves the KSMA as a member of the Committee on Assembly and Arrangements for the 1958 Annual meeting and as chairman of the special committee on television.

Among student award recipients at the University during convocation in May was H. Clark Anderson, Louisville, who as president of the Student AMA wrote a monthly column for the Journal. He won the Omicron Delta Kappa leadership award. The Dr. Dwight L. Pitfin Memorial Award for Scholarship went to Alan M. Bornstein, Louisville, who graduated with a four year average of 96.2—believed to be the highest ever attained by a student at the school. Last year his junior surgical term paper was selected as one of the two outstanding papers in the class and was printed in the Journal.

Other award winners were William P. McElwain winner of the Dr. Parrish B. Cleveland achievement award for showing the most improvement in four years, James Telfer recipient of the Dr. Norvin Green Memorial Prize for an essay, and Max Ervin who received the American Academy of Dental Medicine Award. Kee-chang Huang was named outstanding preclinical professor by votes of medical students.

Joint Meeting at Mammoth Cave

Eighty-two physicians and their wives attended the joint meeting of the Fourth and Sixth Councilor Districts at Mammoth Cave Hotel on June 12, according to reports from W. Keith Crume, M.D., Bardstown, and John P. Glenn, M.D., Russellville, District Councilors.

Program for the meeting included a presentation by Edward B. Mersch, M.D., Covington, KSMA president. Those on the scientific portion of the program were: Walter S. Coe, M.D., Arthur M. Schoen, during convocation in May was H. Clarke Anderson, M.D., all of the University of Louisville Medical School faculty. The meeting was approved for three hours of Category 1 Credit for members of theKAGP.

Fed. Disability Insurance Rulings* Explained by District Manager

The fact that a person may be receiving disability payments for total disability from another government agency, from a private insurance company, or under a company disability retirement system does not necessarily mean that he will be considered disabled under the special provisions of the Social Security law. If he is receiving disability payments under another Federal program (other than the Veterans Administration for service-connected disability), or under a State or Federal workmen's compensation program, the amount of his social security disability benefit will be reduced by the amount of such other benefit.

Another disability provision in the 1956 Amendments is designed for dependent children who become totally disabled before age 18. It makes possible the payment of monthly benefits after age 18 if the present disability began before age 18. In these cases, the mother may also get benefit payments as long as she is caring for her child.

A person disabled in childhood does not need a record of work under social security; however, the child must be dependent upon a parent, stepparent, or adopting parent who is entitled to old-age insurance benefits, or must have been dependent on a parent who died after 1939 and was insured for survivors benefits at the time of death.

Hugh A. McNary, Jr., District Manager
Social Security Administration
Louisville, Kentucky

**This is the third and final article in a series on Federal Disability Insurance which has appeared in succeeding issues of the Journal. They were used at the suggestion of the KSMA Committee on Medical Education and Economies to provide members with more information on handling social security claims of their patients.*



Enjoying a few moments of relaxation after the joint meeting of the Fourth and Sixth Councilor Districts at Mammoth Cave Hotel on June 12 were: Walter L. O'Nan, M.D., Henderson, Chairman of the KSMA Council; John P. Glenn, M.D., Russellville, Councilor for the Sixth District; Woodford B. Troutman, M.D., Louisville, KSMA secretary and treasurer; Edward B. Mersch, M.D., Covington, KSMA president; W. Keith Crume, M.D., Bardstown, Councilor for the Fourth District; and Walter R. Byrne, M.D., Russellville, KSMA vice president (Western).



Getting together to discuss topics of interest to members of the medical profession at the annual meeting of the Seventh Councilor District on May 22 were: James T. Ramsey, Frankfort, president of the Franklin County Medical Society; Woodford B. Troutman, M.D., Louisville, secretary and treasurer of the KSMA; Russell Teague, M.D., Louisville, State Public Health Commissioner; Carl Cooper, M.D., Bedford, District president; Branham B. Baughman, M.D., Councilor for the Seventh District; Edward B. Mersch, M.D., Covington, KSMA president; and J. Farra Van Meter, M.D., Lexington, Councilor for the 10th District.

Only Mentally Ill to be Treated in Ky.'s 4 State Hosps.

"Only persons who are actually mentally ill will be admitted and kept in Kentucky's state mental hospitals, according to an announcement from Commissioner H. L. McPheeters, of the Department of Mental Health.

The new policy is designed to eliminate overcrowded conditions and to help the staffs of the four mental hospitals give better care to the patients who are genuinely ill. Doctor McPheeters said that in the future, the mentally retarded and the aged and infirm who cannot care for themselves, but who are not mentally ill will not be held in the state's mental hospitals.

He also stated that an estimated one-third of the patients in the hospitals could be cared for outside the hospitals—either with their families, approved nursing, boarding or foster homes. Most of the patients who will be released from the hospitals will be eligible for public assistance payments when released. This $58 a month, plus social security or other income could be used for their care in a home, Doctor McPheeters stated.

Service Plaques Awarded at U of L

Five members of the University of Louisville Medical School faculty were among eight faculty members honored with 25-year service plaques at the University's commencement exercises on June 8.

Medical School faculty members receiving plaques were: William J. Martin, Jr., M.D., associate professor in proctology; Robert F. Monroe, M.D., associate professor of obstetrics and gynecology; Henry G. Saam, M.D., professor of surgery; Stanley T. Simmons, M.D., associate professor of medicine; and John M. Townsend, M.D., associate professor of urology.

Officers Elected by 7th Dist.

More than 50 physicians and their wives attended the annual dinner meeting of the Seventh Councilor District at the Frankfort Country Club on May 22, according to Branham B. Baughman, M.D., Frankfort, District Councilor.

District Officers for 1958 elected at the meeting are: H. V. Stewart, M.D., Carrollton, president; George Perrine, M.D., Pewee Valley; and Shelby Hicks, M.D., New Castle, secretary. Speakers at the meeting included Edward B. Mersch, M.D., KSMA president, Covington; Robert W. Hamm, M.D., Shelbyville; and John P. Stewart, M.D., Frankfort.

Osteopaths to Build 5 Hospitals

The Kentucky Osteopathic Medical Association approved a plan to build five osteopathic hospitals in Kentucky at the Association's annual convention in Louisville on June 11-12, according to published reports quoting Glenn E. Cobb, O.D., Providence, outgoing president.

The plan provides for dividing the state into five districts, outlining a building program and assessing members $100 a year to begin a building fund with members of the districts matching on a 50-50 basis money received from the Fund.

SAMA Members Exhibit at Meeting

Exhibits by two Student American Medical Association members were on display at the Annual Meeting of the AMA in June. The exhibits won the top awards at the first scientific exhibit held by SAMA at its annual meeting in Chicago in May. The awards, which included an all expense trip to the AMA meeting, were made as a means of stimulating interest among medical students, interns, and residents in the value of scientific exhibits.

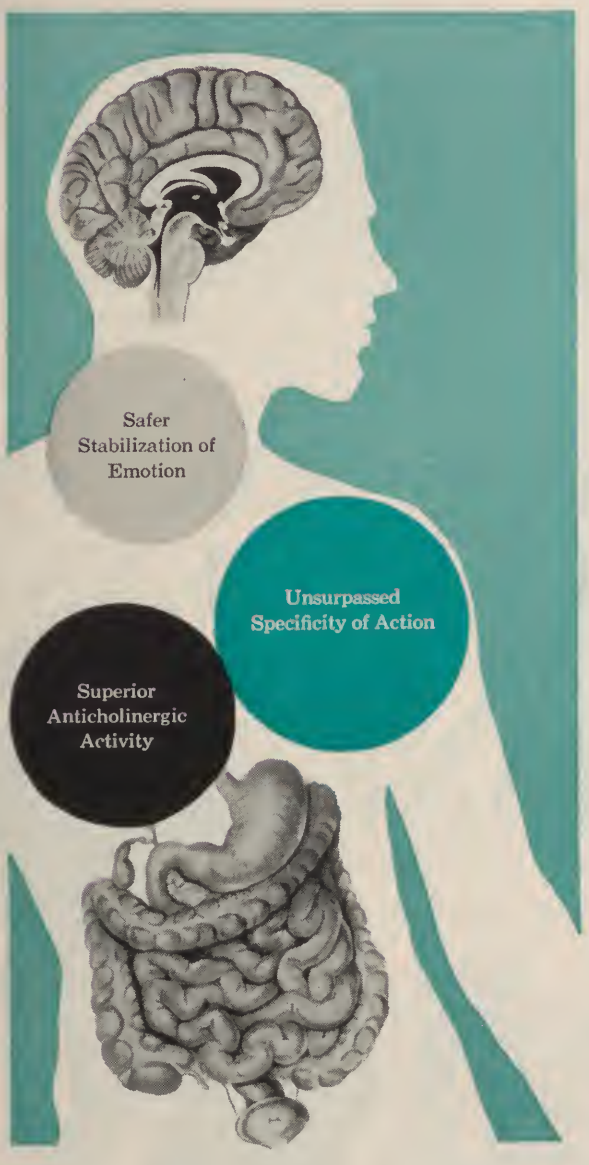
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U of L Trustees Announce Changes in Med School Faculty

A grant of $3,500 from the Commonwealth Life Insurance Company to the University of Louisville Medical School for research purposes was announced at a recent meeting of the University's Board of Trustees.

Appointments and promotions at the Medical School announced at the meeting included: appointment of Phil Joseph Harbrecht, M.D., instructor in surgery; promotion of R. Duncan Dallam, Ph.D., to associate professor of bio-chemistry; Samuel H. Cheng, M.D., assistant professor of medicine; Sam S. Clark, M.D., to assistant professor of anesthesiology.

Also, Marinus Pulskamp, M.D., to professor and chief of the section of proctology, and William J. Martin, M.D., to associate professor of proctology.

Dr. Mitchell Appointed Director

Wilber A. Mitchell, M.D., Louisville, became Director of the Community Services Division of the Kentucky Department of Mental Health on July 1, according to an announcement from Commissioner H. L. McPheeters, M.D. Doctor Mitchell, who replaces Theodore Schramm, M.D., Acting Director of the Division for the past year, recently completed three years of psychiatric residency training at the University of Louisville's Department of Psychiatry.

Dr. Moore Elected by Heart Group

Frank H. Moore, M.D., Bowling Green, was elected president of the Kentucky Heart Association at the group's annual meeting in Louisville on June 12. He succeeds Thomas G. Hobbs, M.D., Lexington. John S. Llewellyn, M.D., Louisville, was elected first vice president. Doctor Moore is also president of the Warren County Medical Society. It was announced at the meeting that the annual heart fund drive in the State yielded $311,000—to exceed its goal by $11,000.

Hearing Conservation Program in 5th Year of Operation

A Hearing Conservation Program—with testing done only on second, fourth and sixth grade children—has been in operation in Kentucky since 1953.

Under the program, children with hearing difficulty are referred to their own physicians for follow up and a course of recommended therapy. Hearing therapy and the fitting of a hearing aid may be obtained from the Hearing Clinic, University of Kentucky, or the Society for Crippled Children in Louisville. A Fund has been set up by the Society for Crippled Children to be used for the purchase of hearing aids for indigent children.

Any county desirous of conducting a hearing screening program may request assistance from the Division of School Health, State Department of Health.

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*Sea food—source of highly potent allergens. Typical are: lobster; tuna; sturgeon roe; fish oil used to prepare leather, chamois, soaps; cuttlefish bone for polishing material and tooth powder; glues made from fish products.

Doctors Volunteer for Global Trip

Gabe Payne, M.D., Hopkinsville, is one of five physicians from throughout the nation, who will visit mission hospitals throughout the world and pass on to medical missionaries the latest techniques and know-how. Funds for the visit to hospitals and clinics in 24 countries will be supplied by $20,000 from the Jarman Foundation of Nashville churchman and manufacturer, W. Maxey Jarman.

The volunteer mission—an idea born in Louisville last year at the Layman's Leadership Institute at the Baptist Theological Seminary—is officially sponsored by the Baptist World Alliance. The team has been furnished with $250,000 worth of drugs donated by 20 pharmaceutical firms and the doctors have taken 23 films illustrating medical procedures with them.

Muldraugh Hill Meets Aug. 14

The Muldraugh Hill Medical Society is scheduled to meet on Thursday, August 14 at 10 a.m. at Ireland Army Hospital, Fort Knox, Kentucky, according to Joseph C. Ray, M.D., Louisville, secretary of the Society.

Those on the program will be Marion Beard, M.D., Louisville, "Treatment of Leukemia"; Captain Jerome M. Fabricant, Fort Knox, "Heatstroke"; Israel Muss, M.D., Louisville, "Topic on Physiotherapy"; Captain Paul D. Redleaf, Fort Knox, "Coronary Artery Disease"; Major John B. Sarracino, M.D., "Vomiting in Infancy"; and C. C. Starr, M.D., Louisville, "Some Aspects of Carcinoma of the Thyroid Gland."

NEWS ITEMS

James V. Lowry, M.D., who was formerly chief medical officer of the Public Health Service Hospital in Lexington where patients are treated for mental disorders, including narcotic addiction, was recently named to a top Public Health Service post. He is now chief of the Bureau of Medical Services—with the rank of assistant surgeon general.

E. P. Scott, M.D., Louisville, was elected president of the Louisville Pediatrics Society at the annual meeting on May 27. He succeeds **Selby V. Love, M.D.,** Louisville. **Martin J. Harris, M.D.,** Louisville, was elected president-elect and **Patrick Hess,** New Albany, was re-elected secretary.

Mrs. J. Andrew Bowen, Louisville, president of the Woman's Auxiliary to the KSMA, was honored at a tea marking the formal opening of the Ephraim McDowell Home in Danville. The tea which was given by the Auxiliary featured hostesses dressed in period costumes.

Russell Rudd, M.D., Fulton, was elected president of the National Eclectic Medical Association at its 110th annual convention in Little Rock, Arkansas, on May 27-28. At the meeting plans were made to hold the next annual convention at Kenlake Hotel, Kentucky Lake.



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1. Thomas, J. W.: Ann. Allergy 16:128, 1958

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PERTINENT PARAGRAPHS

The Veterans Administration has cancelled all plans for reductions in employees and shutdowns of hospital beds that were expected to result from a fiscal year 1958 funds shortage before July 1, according to a recent VA announcement Additional money approved by Congress and the President for operation of the agency's hospitals made the reductions unnecessary, the announcement said. An urgent deficiency appropriation of $2.4 million for VA hospitals recently was signed into Law by the President. The funds squeeze during the last quarter of fiscal 1958 resulted from a drop in the agency's collections from insurance companies for hospitalization of insured veterans.

A one-day course in Cardiac Resuscitation will be conducted at the Emory University School of Medicine, Atlanta, Georgia, on October 3, 1958. Visiting faculty will include: Paul Zoll, M.D., Beth Israel Hospital, Boston, and David S. Leighninger, M.D., Lakeside Hospital, Cleveland. For further information write to: Postgraduate Education, Emory University School of Medicine, 69 Butler St., S. E., Atlanta 3, Georgia.

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More than $4 billion—a rate of about $11 million per day—of the nation's health care bill will be paid in 1958 through voluntary health insurance programs, according to the Health Insurance Council. The estimate was made on the basis of results of a survey of health insurance coverage in the United States for 1957. Benefit payments to help cover the cost of hospital, surgical, and medical care amounted to $3.5 billion in 1957—or a gain of 20.7 per cent over 1956 and an all time high.

NEWS ITEMS

Elaine J. Knutson, M.D., who has opened an office in Lexington for the practice of psychiatry, is a graduate of Stanford University School of Medicine in 1954. A native Californian, she took internship and residency training in Delaware, Pennsylvania and at a VA hospital in Richmond, Virginia.

C. W. Christine, M.D., formerly of Maysville, has resigned his position as ward physician at the Veterans Hospital in Fort Thomas. Although, at press time, he had made no definite future plans, he does plan to re-establish private practice. He was head of the Mason County Health Department from August, 1938 until October, 1943.

R. D. Pitman, M.D., a graduate of the University of Tennessee, Memphis, in 1955, is associated with his uncle **Raymond Sanders, M.D.,** in general practice in Williamsburg. Doctor Pitman who interned at John Gadsen Hospital in Memphis is also a member of the active staff of the Southeastern Kentucky Baptist Hospital in Corbin.

David S. Colvin, M.D., has resigned from his position as health officer for Hardin and Meade counties to go on two years active duty with the U. S. Navy as a Lieutenant.

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Repository Accepts Applications

The first applications for depositing medical credentials in a central repository were taken on the opening day of the 107th AMA annual meeting in San Francisco. Established by the World Medical Association as the result of a suggestion made by the Student American Medical Association in 1954, the repository is designed to safeguard medical credentials in case of war or catastrophe, so that the physician will have records to prove that he is fully trained and accredited to practice medicine.

Daily Bulletin of Air Presented

During the annual meeting of the American Medical Association in June a Daily Bulletin of the Air summarized top scientific events at the meeting for both physicians and the public. Initiating the daily broadcasts and telecasts was a special "Salute to San Francisco" over television. The primary purpose of the programs was to provide the public with an indication of the work reported on and discussed at an AMA meeting.

Dr. Kornhauser's Successor Named

William B. Atkinson, Ph.D., Cincinnati, has been named head of the anatomy department at the University of Louisville School of Medicine to succeed S. I. Kornhauser, Ph.D., who will retire on September 1. Doctor Atkinson is presently associate professor of anatomy at the University of Cincinnati College of Medicine.

News Items

Edwin R. Davis, M.D., has taken over the practice of **William M. Johnson, M.D.,** in Owingsville. Doctor Johnson is attending the University of Texas School of Medicine, Galveston, for specialized training. Doctor Davis is a graduate of the University of Louisville School of Medicine in 1956. After interning at St. Elizabeth Hospital in Dayton, Ohio, he practiced in Jeffersonville, Ohio.

Martin S. Kleckner, Jr., M.D., a graduate of the University of Pennsylvania School of Medicine in 1945, has joined the staff of the Fuller-Morgan Hospital in Mayfield and will limit his practice to gastroenterology. He took his internship and residency training in internal medicine and gastroenterology at the Mayo Clinic. Later he joined the Ochsner Clinic in New Orleans as a gastroenterologist and was an assistant professor of medicine at Tulane University. Before coming to Mayfield he was an assistant professor of internal medicine at Yale University.

William B. Hilbun, M.D., has left his practice in Jamestown to go on an 18-month tour of duty with the U. S. Air Force Reserve. While he is gone **James E. Monin, M.D.,** a graduate of the University of Louisville School of Medicine in 1957 who has just completed his internship at St. Joseph Infirmary will take over his practice. When Doctor Hilbun returns, he and Doctor Monin will practice together.

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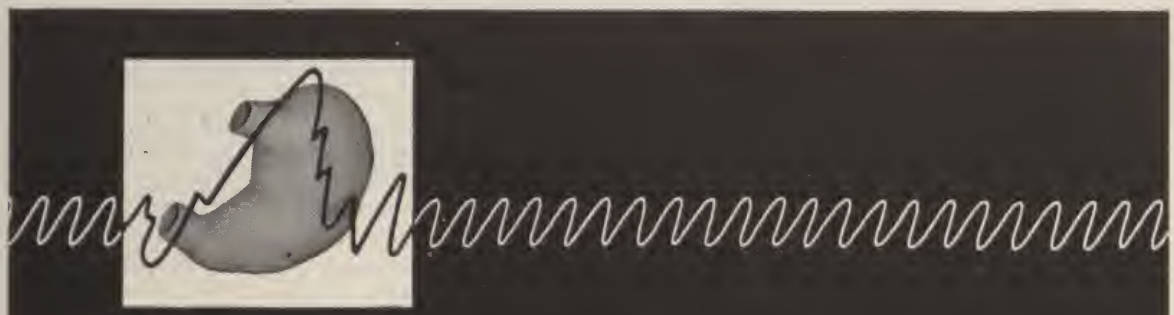
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In Memoriam

ROBERT E. GATZ, M.D.
Fern Creek
1886 - 1958

Robert E. Gatz, M.D., who had practiced in Louisville and Fern Creek since 1906, died at his home in Fern Creek on June 6.

The 72-year-old Louisville native had practiced in Louisville for 35 years before moving his office to Fern Creek 17 years ago. He graduated from the Hospital College of Medicine in Louisville in 1906 after receiving a degree from the Louisville College of Pharmacy in 1903.

CODY JONES, M.D.
Lynn Grove
1884-1958

Cody H. Jones, M.D., who had been in declining health for several years, died at his home in Lynn Grove on Tuesday, May 22, at the age of 74.

A graduate of the University of Louisville Medical School in 1912, Doctor Cody first started practicing in Murray where he was instrumental in establishing the former Keys-Houston Clinic Hospital in Murray. He later moved to the western part of Calloway County.

N. DOUGLAS ABELL, M.D.
Louisville
1874-1958

N. Douglas Abell, M.D., who had retired from active practice, died at his home in Louisville on June 18 at the age of 83.

A graduate of the University of Louisville Medical School in 1909, Doctor Abell had limited his practice to the eye, ear, nose, and throat. He did postgraduate work at the Manhattan Eye, Ear, Nose and Throat Hospital in New York and the Mayo Clinic in Rochester, Minnesota. He had practiced in Louisville since 1911.

JOSEPH P. WINSTON, M.D.
Anchorage
1870 - 1958

Joseph Pendleton Winston, the first practicing physician in Anchorage, died after an illness of several months in Pewee Valley Hospital on June 15.

Doctor Winston had practiced in Anchorage for more than 60 years following his graduation from the University of Virginia School of Medicine in 1892. He was a native of Richmond, Virginia.

J. Duffy Hancock, M.D., Louisville, is attending the International Cancer Congress in London, July 6-11. Mrs. Hancock and his daughter, Johanna, will accompany him to England.



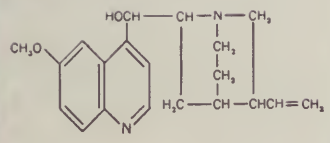
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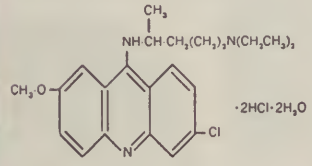
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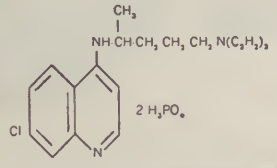
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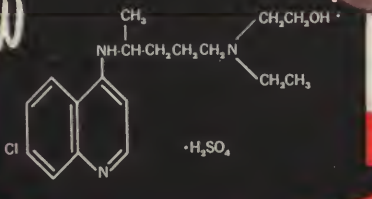
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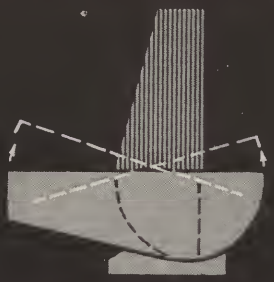
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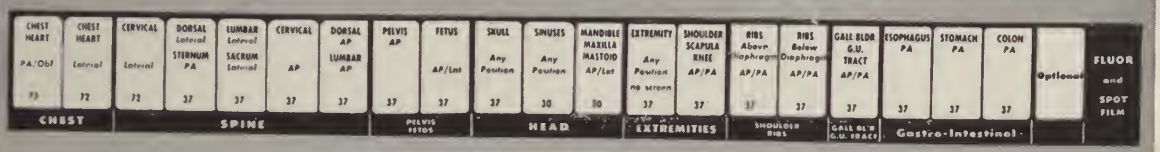


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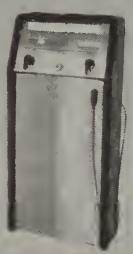
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1. Russek, H. I.: Postgrad. Med. *19*:562 (June) 1956.

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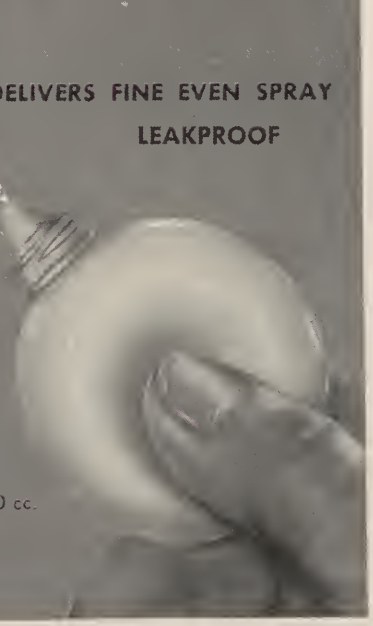
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references:

1 Grieble, H.G., and Jackson, G.G.: Prolonged Treatment of Urinary-Tract Infections with Sulfamethoxypyridazine. *New England J. Med.* 258:1-7, 1958

2. Editorial: *New England J. Med.* 258:48-49, 1958.

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2. Baird, H. W., III: A comparison of Meprospan (sustained action meprobamate capsule) with other tranquilizing and relaxing agents in children. Submitted for publication, 1958.

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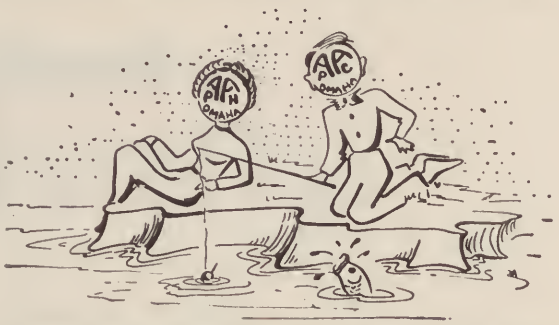
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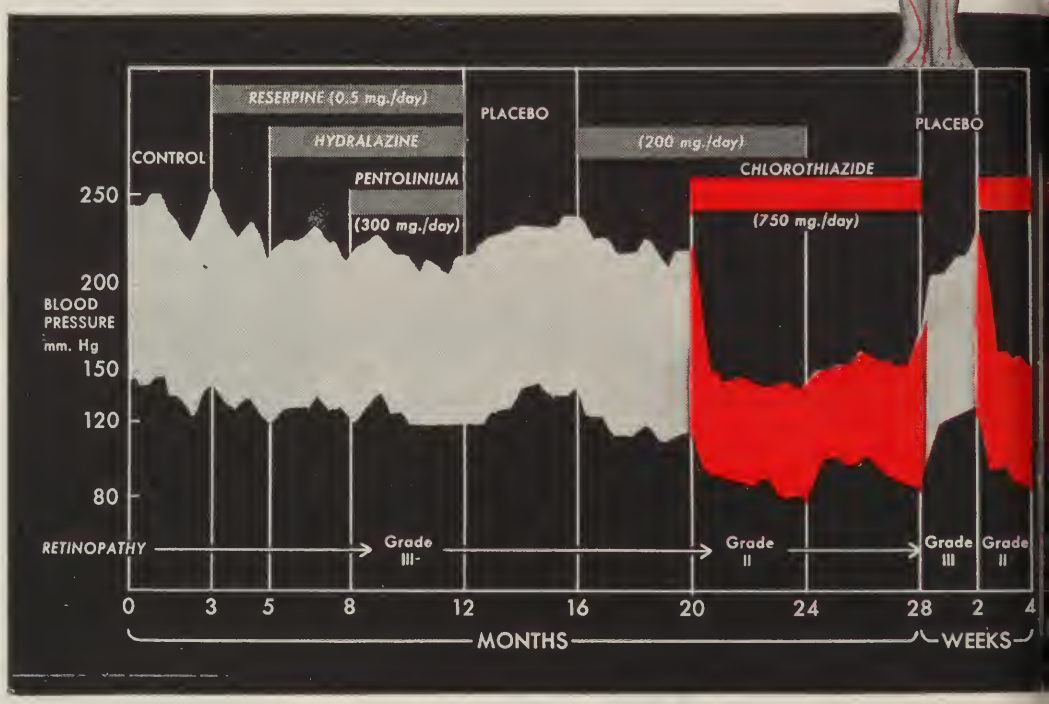
Wilkins, R. W.: New England J. Med. **257:1026**, Nov. 21, 1957.

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Freis, E. D., Wanko, A., Wilson, I. H. and Parrish, A. E.: J.A.M.A. **166:137**, Jan. 11, 1958.

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In "Chlorothiazide: A New Type of Drug for the Treatment of Arterial Hypertension,"
Hollander, W. and Wilkins, R. W.: Boston Med. Quart. 8: 3, September, 19

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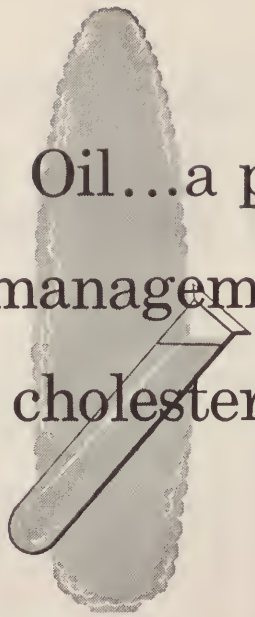
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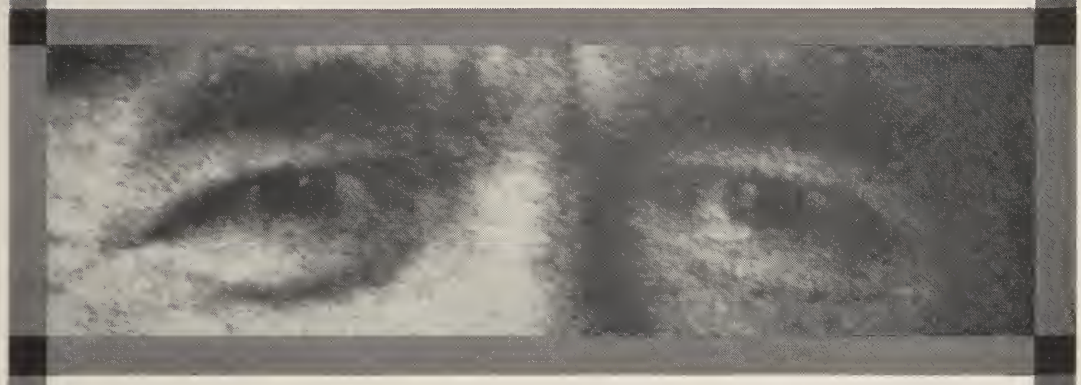
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Source—Hyman, M.: Some Aspects of Psychiatry in General Practice, GP *16*:83 (Oct.) 1957.

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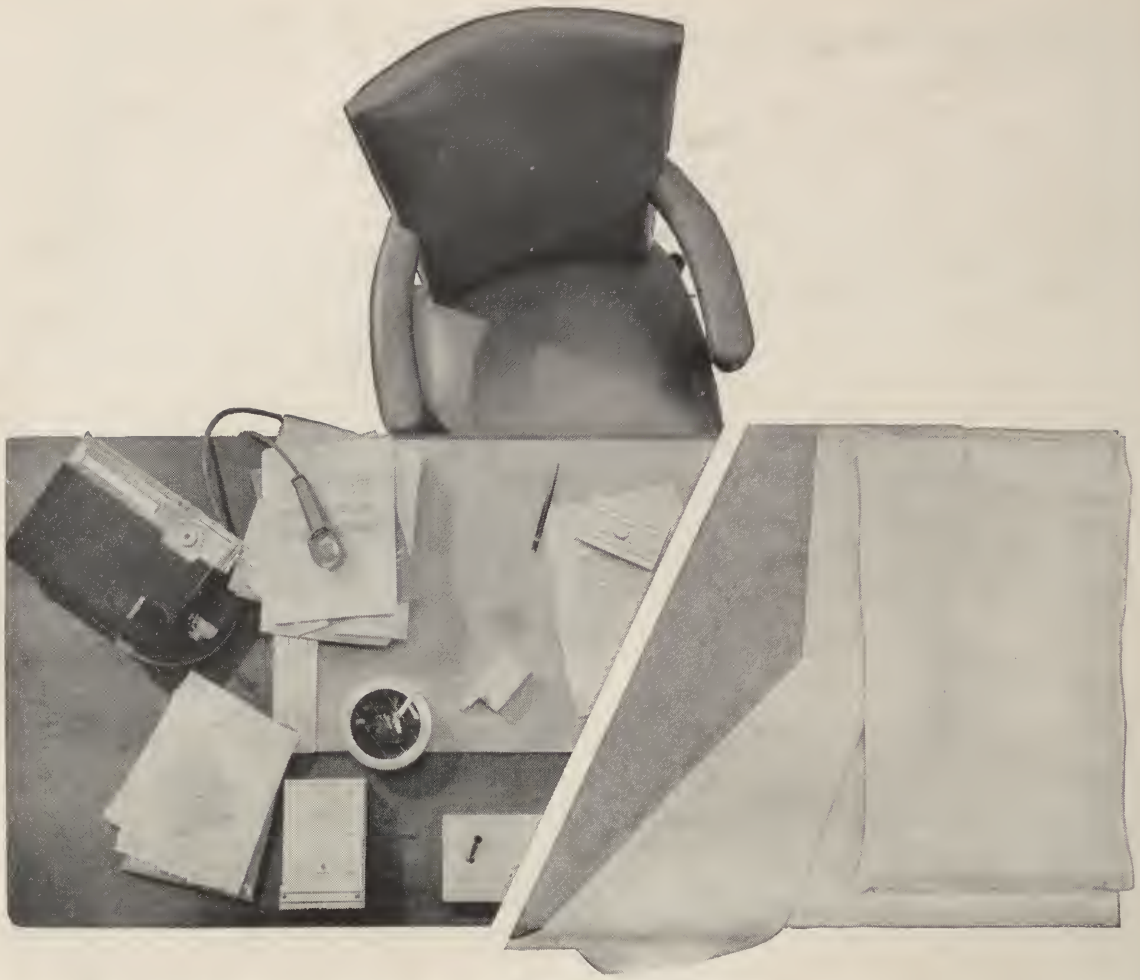
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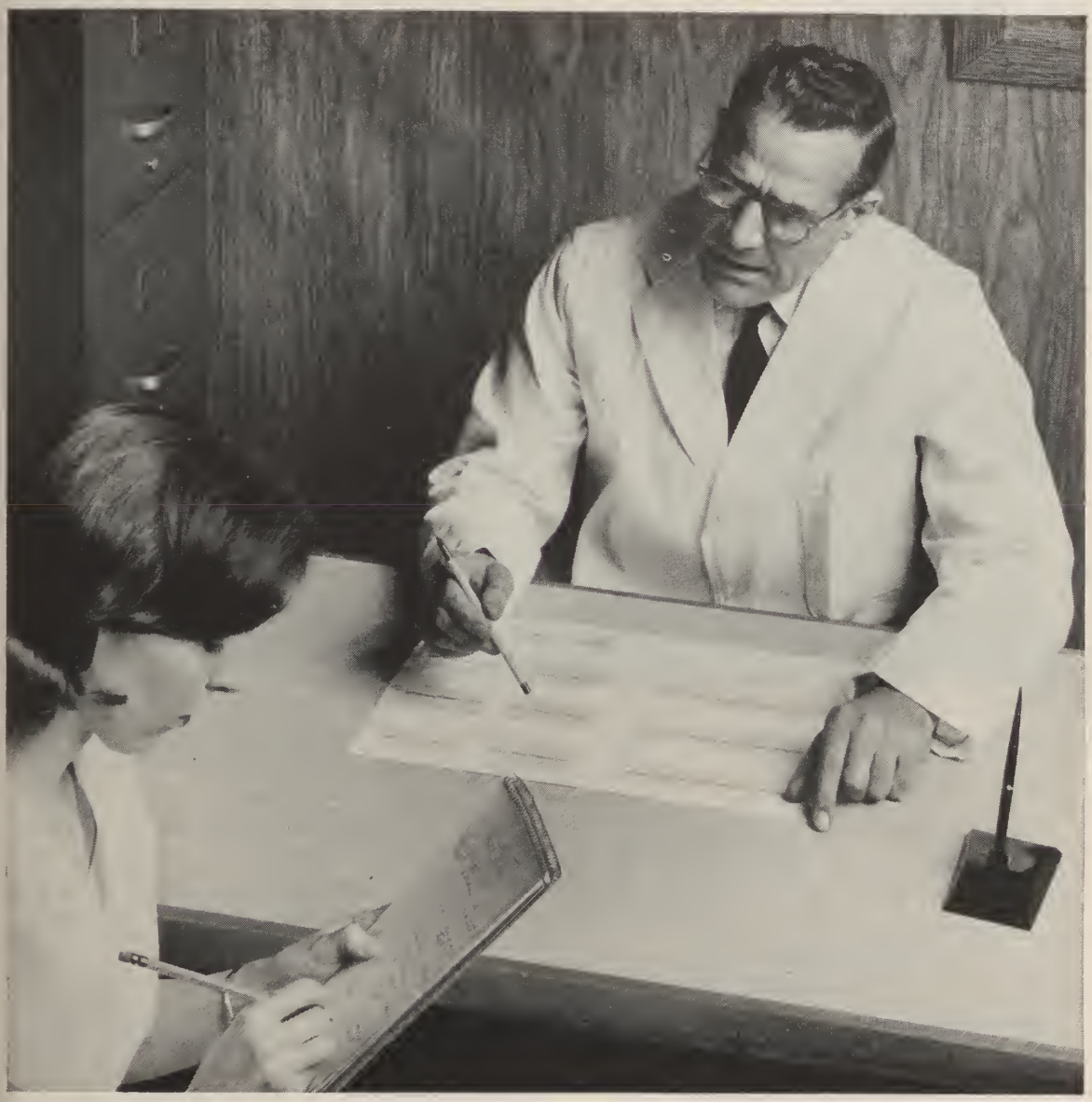
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message from the President

Why This Harvest?

AUTUMN is usually considered the harvest time. It is a time for gathering in the products of our labors. It is a time for rejoicing, for we have reaped the benefits of many an hour of work. It is the time to appraise our efforts.

To quote from the poem "Happy Harvest Time" by Virginia W. McPheeters:

The bounty of the harvest
Is reward for work well done,
When man can rest in peace
Knowing that his victory's won.

So in every life youth's promise
Will bear fruit in autumn years;
Seeds sown in the springtime
May reap laughter or some tears.

Thus, be careful of the plantings
You may make along life's way.
That you may reap rich harvest
Some glorious autumn day.

The harvest I refer to, is the product of our public school system—the youth of today, the man of tomorrow. I am referring to the products of the New Educationists. The harvest from this socialistic education system—New Educationists—have been taught what to think, not how to think. They have had instilled into them the essence of Socialism. They have not been taught how to be an American.

Education begins in the home, but in recent years the tendency has been for the parents to shirk their duty. They have shifted more and more of their own responsiblity to the teachers in the school system, and they have assumed that everything was as it should be. They did not take the time nor the trouble to find out.

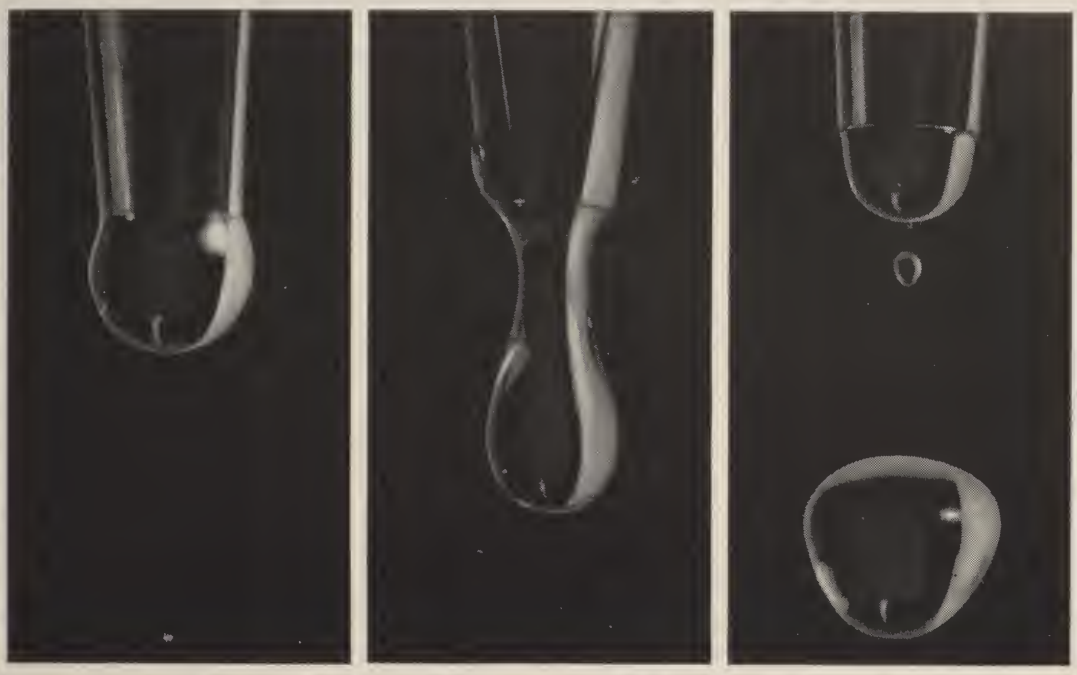
Had they investigated they would have discovered that the traditional school system, which had shaped the minds of generations of our citizens, had been drastically altered or omitted. They would have discovered that history, geography and civics were discarded subjects. A new and confusing course—Social Science—has supplanted them. And this subject —Social Science—is the "core of the whole program" and the seat of the trouble.

This program of social science is riddled with new concepts and doctrines. Some of these concepts contradicted and condemned ideas which were held by the majority of the American people. This course has been built around the text books of Dr. Harold Rugg, of Teacher's College, Columbia University. Dr. Rugg has loaded his texts with arguments supporting statism, and upholding collectivist doctrines as superior to the sound principles of Americanism. These statements constitute a severe indictment of our way of life. This slanted partisan course is being taught in our public schools. These 'off base' economic and political theories are being presented to our youth with its plastic mind as 'social science.' These text books were approved by the New York State Board of Education, and subsequent approval throughout other states, was given to these and other kindred texts of like false philosophies.

This was accomplished by a comparatively small number of educators in strategic positions, who by moving skillfully into axial centers of education, have welded their leftist-liberal, economic, social and political philosophies into an educational philosophy which has caused a veritable revolution in our public school system. So complete has been their victory, that most of the leaders of the dominant teachers' organizations and teacher-training colleges and institutions, which screen new teachers into the schools, have either accepted or conformed to this new curriculum with its educational philosophies—The New Educationists—a product of and a continuation of so-called Progressive Education.

The principles and philosophies promulgated by this educational group is Socialism itself. The New Educationists admit that their aim is not to turn out better citizens to live under our present social order, but to build a new

(Continued on Page 724)



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Social Order, and the schools under their direction, are to act as the spear heads. Education used to strive to teach the student how to think and reason. The New Educationist is concerned with what they think. They are crusading for social aims as the primary purpose of education.

This New Educationist group had its beginning in the early twentieth century under John Dewey and became known as the Progressive Education Group. It has changed its name and altered its principles slightly thru the years, being known as the soft, the hard progressives, etc. But whatever the name, the principles and facts are socialistic, and will eventually lead to an atheistic socialism.

Progressive education was tried in Russia and given up in 1933, because discipline in the school was lacking or was weak. The student government had taken control, and the teacher was assigned a passive role, or none at all. The Soviets finally discarded the system with an order to abandon the "wasteful and chaotic project method and return to standards and system in education." After fifteen years of Progressive Education, the Soviet returned this educational failure to America. They, however, took the lesson to heart, and insisted on basic knowledge in the education of their children in addition to the vicious propaganda courses.

While the Soviets saw the evil consequences of New Education, our educational leadership embraced it with fanatical zeal. Since then, the schools of Russia have improved markedly in imparting the foundation knowledge so essential in the training of engineers, scientists and other leaders in an atomic age, while millions of American youths have found themselves seriously handicapped, because their schools have failed to educate them properly on these important subjects.

Dr. Rugg, the forerunner of New Education, insisted that the loyalties deep-seated in the American people, must be uprooted, and to "change the climate of opinion" of Americans, he advocated a bloodless revolution by education. He deplored the flag salute, saying that the young nationals might grow up feeling their country is superior to another. This teacher of teachers vigorously attacked our economic system. Repeatedly we find him advancing Beards and Karl Mark's vicious theory of "economic determinism" subtly advanced instead of our Constitution.

But what are some of the results under this New Education System?

Our colleges have shown by a nation-wide test, that high school students possess an insufficient knowledge of U. S. history. A large majority of college freshmen could not identify such names as Abraham Lincoln, Thomas Jefferson, Teddy Roosevelt. Social study extremists are responsible for the neglect of American history in the high schools and elementary schools of the nation.

The course Civics-Concepts of Government, the study of the U. S. constitution, its history and philosophy, and the functioning of our government, has been dropped. Only one student in 17 took a course in civics, and this lately has stressed police, firemen, garbage removal, fly control and similar matters of local government control rather than the function of our Federal Government. The result of this is that a large per cent of our high school students reject Democracy, and that a majority agree at least in part with the principles of Karl Marx.

Geography is a lost subject. Few students know the geographical boundaries of our own country, and little about the world.

In addition to the scuttling of history, civics and geography to make room for "social aims", courses in the revised curriculum, other fundamental subjects have been denied adequate time, or eliminated as unsuited to the new purpose in education. Arithmetic, reading, grammar, spelling and writing all suffered to some degree, depending to what extent the New Education dominated a public school. You but need to look at the results and statistics of the Army and Navy exams. Even some of our college graduates are illiterate.

Until about 1930, most of the economic courses taught in our schools and colleges had approved the traditional American free enterprise system. They recognized some of its defects, but also realized that it is the only possible economic system which gives full play to individual opportunity and provides incentive and competition essential to economic growth and progress. The New Educationists reject this thesis. They regard the profit motive as anti-social. Competition is regarded only as a product of capitalism. This new society of leftist-liberals, would have the economic base shifted from capitalism to collectivism, controlled or managed by government.

(Continued on next Page)

And, this brand of left-slanted economics was given in educational courses of the Armed Forces during World War II. An example is the two-volume text entitled "Economics: Principles and Problems" by Paul F. Gemmill, University of Pennsylvania, and Ralph H. Blodgett, University of Illinois. It is probably still being taught our Armed Forces.

The NEA—National Education Association—is a left of center outfit. It advocates and uses the so-called New Educationist System. At its July '57 convention it doubled its budget to nearly seven million dollars by doubling the dues of the NEA teacher-members from $5.00 to $10.00 and the officials of NEA admit that approximately 10% of this budget will be used for lobbying purposes in Washington, D. C.

The NEA claims a membership of 700,000 public school teachers, and is believed to extend into every school in the nation.

These students today, are the leaders of tomorrow. Is it any wonder that more and more socialistic ideas and schemes are cropping up daily, and subtly foisted upon us? There is no doubt that the Government is heading more and more to internationalism and socialism. And, it will get worse, unless we start to take some action now.

It is time that we begin to right the wrongs. It is time that we check into our educational system and throw out the despoilers of our American heritage. It is time to elect officials and legislators who are Americans. It is time to return America to the Americans. It is time to band together and reject all international theories and socialistic sabotage. It is time to become Americans again. It is time to stop playing politics and to start playing America—the land of the Free and the home of the Brave.

It is time to remember what Abraham Lincoln said: "You cannot bring about prosperity by discouraging thrift. You cannot strengthen the weak by weakening the strong. You cannot help the wage earner by pulling down the wage payer. You cannot further the brotherhood of man by encouraging class hatred. You cannot help the poor by destroying the rich. You cannot establish sound security on borrowed money. You cannot keep out of trouble by spending more than you earn. You cannot build character and courage by taking away man's initiative and independence. You cannot help men permanently by doing for them what they could and should do for themselves."

E. B. Mercer M.D.

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IN THE BOOKS



Books Received

Following is a list of books received by the Association for review. Those considered of particular interest to Journal readers will be reviewed as space permits. All complimentary copies of books received are turned over to the University of Louisville-Jefferson County Medical Society Library. Inquiries concerning a particular book should be made to the KSMA Headquarters Office, 1169 Eastern Parkway, Louisville 17, Ky.

ORTHOPEDIC DISEASES: by Ernest Aegerter, M.D., and John A. Kirkpatrick, M.D., published by W. B. Saunders Company, Philadelphia and London.

CORRELATIVE NEUROANATOMY AND FUNCTIONAL NEUROLOGY: by Joseph C. Chusid, M.D., and Joseph J. McDonald, M.D., Lange Medical Publications, Los Altos, Calif.

THE CLINICAL PHYSIOLOGY OF PHYSICAL FITNESS AND REHABILITATION: by Ernest Jokl, M.D., published by Charles C. Thomas Co., Springfield, Ill.

AIDS TO MEDICAL DIAGNOSIS: G. E. F. Sutton, M.C., M.D., published by Williams and Wilkins Company, Baltimore, Md.

MODERN CLINICAL PSYCHIATRY: by Arthur P. Noyes, M.D., and Lawrence C. Kolb, M.D.; published by W. B. Saunders Company, Philadelphia and London.

GENERAL PATHOLOGY: edited by Sir Howard Florey, published by W. B. Saunders Company, Philadelphia and London; February 12, 1958; second edition; 932 pages; illustrated; price, $16.

This book can be recommended, but in a limited sense.

Florey's "General Pathology" has been properly named. The approach to the subject is not systemic but general. The purpose of this book is not to present the usual facts of morbid anatomy.

The text is based upon the material of fifteen lecturers at the University of Oxford. The lecture material comprises a four month course designed for the better student.

The aims of this course are to encourage the student to reason and to stimulate him to investigation. The basic principles underlying pathologic changes are presented clearly and in considerable detail. Pertinent information is liberally drawn from the related medical sciences.

Since the authors are dealing with their chosen fields of interest, the material is presented with authority and enthusiasm. For the same reason, however, there are gaps in the subject matter. The book is admittedly not comprehensive.

The text is illustrated with photographs, charts and tables. Usually, where some classic or crucial experiment has been done in a given field of investigation, the original worker's data are presented. This has the desirable effect of presenting information in its nascent state, making it more interesting and memorable.

A pathology book with a unilateral approach such as this has its disadvantages as well as advantages. There is a lack of clinical orientation and of practical information in the usual sense. Most textbooks of pathology obviate this by the combined approach.

Florey's "General Pathology" would seem to be of most value to (1) students considering investigative work, (2) pathology residents, and (3) any practitioner who desires to become re-grounded in the principles of pathology as they have been re-formulated by up-to-date knowledge.

Wallace Lyle Past, M.D.

CLINICAL HEART DISEASE: by Samuel A. Levine, M.D.; published by W. B. Saunders and Company, Philadelphia and London, fifth edition, January 2, 1958; 673 pages, 216 figures, price, $9.50.

The fifth edition of this widely used textbook is again a delightful and informative text. Throughout the book the emphasis is on bedside observation which again makes it of great value to the general practitioner as well as to the internist or cardiologist.

The major changes over previous editions are the sections by Dr. Harold D. Levine on Electrocardiography and the section on Congenital Heart Disease by Dr. Alexander Nadas.

The section of Electrocardiography is a textbook in itself. This is very well illustrated by numerous electrocardiograms with clear-cut commentary as to the clinical significance.

The section on Congenital Heart Disease offers a clear understanding and classification of these disorders. Prognosis of the various lesions with and without operative intervention, physiological considerations, and interpretation of newer diagnostic procedures are all discussed clearly.

Throughout, the text is frequently spiced by case illustrations and personal experiences which the author has had over the years. This personal approach to cardiology makes the book all the more enjoyable.

The advances in cardiac surgery are pointed up emphasizing the necessity for exact cardiac diagnosis. The section on rare forms of heart disease is perhaps too brief but certainly gives the reader a glance of many unusual problems. The chapter on prognosis in heart disease is excellent and all who read this should profit from it.

Perhaps the lack of bibliography makes it of limited value to those who are research-minded but all who are interested in clinical medicine should have this book at their disposal. Not only will the general practitioner find this book of considerable value to him, but the internist and cardiologist will also continue to enjoy it.

Ralph M. Denham, M.D.

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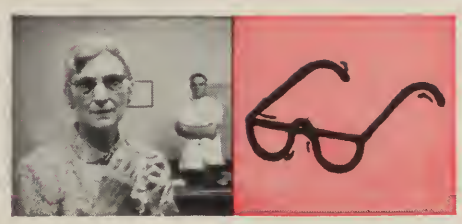
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PUBLIC HEALTH PAGE

The Biologic False Positive Reaction: Prognostic Significance

RUSSELL E. TEAGUE, M.D.

Commissioner of Health, Commonwealth of Kentucky

FROM work done and in progress at the Chronic Disease Division of the Medical Clinic, Johns Hopkins,[1-6] it seems apparent that the prognosis of the chronic biologic false positive reactor to the routinely employed serologic tests for syphilis is more grave than of the patient who has untreated syphilis.[8-10]

"Indeed, the physician is no longer justified, when he has identified a chronic biologic false positive reactor in dismissing his patient with congratulations on the absence of syphilis. Instead he is faced with a lengthy and detailed clinical investigation to attempt to identify the cause of the biologic false positive reaction; and this may and usually does mean prolonged periodic observation and re-examination." This warning was given us by the late Joseph Earle Moore[5] three years ago when he had found evidence of diffuse connective tissue disorder, particularly systemic lupus erythematosus, in nearly 50% of a group of 148 chronic biologic false positive reactors whom he had followed from one to twenty years. The work of Moore and his co-workers which according to present plans will extend further over two or more decades[6] has altered our concepts of systemic lupus erythematosus often permitting a better prognosis. Moreover it has introduced to the physician diagnosing the chronic biologic false positive reactor a grim outlook for his patient's future.

Moore and Mohr[3] established the concept that there are two types of biologic false positive reactors: "acute" and "chronic." The prognosis of the acute is different from that of the chronic. The acute can be caused by almost any immunization or febrile illness and is characterized by spontaneous reversal to seronegativity usually within three or at the most six months. While in the acute reactivity disappears shortly after the subsidence of the etiologic acute process, the chronic biologic false positive is characterized by seroreactivity for longer than six months—often for life. Moore and Lutz[5] suggest that the chronic variety is more frequently encountered than the acute since for the latter the chance occurrence of routine serologic testing must coincide with a precipitating infectious disease or an immunization.

It is a self-evident truth that the diagnosis of syphilis cannot be made or disproved with only one routine serologic test for syphilis and one "follow-up test to rule out lab error." Of course, in the presence of good history, physical or neurologic evidence of syphilis, it may be safe to assume the obvious. In the absence of such evidence this can become an extremely dangerous assumption.

It would seem then to be the minimum responsibility of the physician, dealing with a patient with a reactive serologic test for syphilis and no clinical evidence of early or late syphilis, to ascertain by serial examinations if the test remains reactive three to six months or longer. If seroreversal occurs, it should be determined by reasonable follow-up that the seronegativity continues. If seroreactivity persists, however, an adequate work-up should be pursued to completion in the hope of finding syphilis—a treatable and curable disease. If one's special interests and capabilities do not lie along these lines, it would seem reasonable to refer the patient to a qualified physician interested in syphilis and also capable of diagnosing and managing whatever chronic disease may later appear in the chronic biologic false positive reactor.

*Paper prepared by Milton B. Moore, M.D., Clinician, Div. of Preventive Medicine, State Dept. of Health.

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From the Files of the

Committee for the Study of Maternal Mortality

CASE No. 5: A 20-year-old white gv 2 para 1 at 35 weeks had a sudden onset of vaginal bleeding, a very hard, tender uterus with a closed cervix. Her prenatal course was essentially normal. She was seen initially in her second month and was due by menses, October 13, 1957.

She had some pyelitis during July and August that responded to Kynex and Azogantrisin. Her urine was described as normal throughout. The blood pressure was 130/90—132/90 at the last two visits prior to admission. There had been no previous prenatal episodes of bleeding.

The bleeding began around 5:45 a.m., September 17, 1957. On admission at 6:05 a.m. on that day physical examination of the abdomen showed the uterus at about term size, very hard and tender. The patient appeared to be in a state of early shock. Blood pressure was 100/70, F. H. T. was not heard, vaginal examination revealed no dilatation of the cervix, but a large amount of bright red blood, and no palpable placenta. The only lab. work recorded was the urinalysis with four plus alb., sugar neg. micro.-5-8 WBC.

The patient was taken to surgery at approximately 7 a.m. and under general anesthesia a low cervical section was performed. The duration of the procedure was one hour and 45 minutes from the time that the anesthetic was given the patient. The general condition of the patient following surgery according to the anesthetic record was average to poor because of blood loss. Blood pressure during surgery averaged 90/50-60. When she was moved to the recovery room the patient was cyanotic and the pulse extremely weak, almost not palpable. She was still bleeding profusely from the vagina and her body was cold. Oxygen was started and cut downs on both ankles and one unit of blood started. A second and third bottle were given and at 10:30 a.m., according to the nurse's notes, the blood pressure was 110/80. The patient still continued to have a small amount of vaginal bleeding at 11:15 a.m. so she was given 100 mg solu cortef plus 1 amp. of vasoxyl. The patient began to respond, her color improved and her skin was warm, and after having a period of extreme restlessness she became more quiet. She was given another unit of blood plus 1000 cc G/W with 1 amp. pitocin, but at 11:30 a.m. her pressure had dropped to 80/60. At 1 p.m. she again became quite restless, cyanotic with poor respiration and pulse. She was given 1/6 gr morphine, 1 cc coramine and 1 amp of vasoxyl plus 75 mg solu cortef. She was still having a small amount of vaginal bleeding, the extremities were cold.

By 4 p.m. a urine specimen was obtained, but not enough to measure the specific gravity. The respirations of the patient became labored and at 4:30 p.m. they were unable to hear a heart beat, any pulse, nor record the blood pressure. The patient had a moderate amount of bright red blood at this time. The respirations became deep and shallow at a rate of 24 per minute. The patient continued to have a small amount of vaginal bleeding around 8 p.m., she became extremely cyanotic, the respirations were 12 per minute and at 8:40 p.m. the patient expired.

She had received a total of 2500 cc of whole blood, 1000 cc G/W, 175 mg solu cortef, 2 cc vasoxly, 1/6 gr morphine, 1 amp pitocin with the i. v.

Autopsy was done and on opening the surgical incision, a fair amount of blood clots were found in the subcutaneous adipose tissue at the level of the incision as well as in the recti muscles. The pelvis was full of blood clots and free bloody serous fluid approximately 500-600 cc in amount. Both broad ligaments, especially the one on the left side were distended with blood clots and the retroperitoneal structures extending from the floor of the pelvis up to the level of the second lumbar vertebra contained also large amounts of blood and blood clots. Examination of the uterus revealed the incision closed by an interrupted stitch. In the lower part of the uterine incision and the one immediately above, there was an opening on the uterine wall along the incision and an interrupted catgut stitch was loose.

The cause of death was considered due to shock produced by blood loss secondary to a slipped suture in the operative wound of the post pregnant uterus.

Comment

In retrospect, this death must be considered preventable. In this case the treatment of choice was correct. Frequently, a multipara with an abruptio can be delivered vaginally with pitocin used to stimulate labor. This would be more desirable, as here the baby was realized already dead. Occasionally in severe abruptios, afibrinagenemia is encountered, where no blood clot is obtained. Should this be suspected, the section should not be started until this defect is corrected lest bleeding be encountered from each suture taken.

In this case, when the patient continued to bleed vaginally, in spite of the blood replacement and i. v. pitocin it would seem, reexploration should have been carried out. In anticipating a possible Couvelaire uterus a hysterectomy could have been planned, or, if her condition was too critical, ligation of the uterine vessels or hypogastric vessels bilaterally should offer control of the bleeding. Of course, if the abdomen were reopened the diagnosis would have been apparent.

**This is the fourth of a series of discussions which will appear monthly on a trial basis.*



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WASHINGTON NEWS DIGEST



Washington, D. C.—For the first time since the idea was proposed more than seven years ago by President Truman and Oscar Ewing, legislation to tack a hospital and medical service program onto social security has received a thorough airing before a Congressional committee.

For 11 days the House Ways and Means Committee listened to testimony on this and other suggested changes in the law. The hospitalization plan—now identified as the Forand bill, for its sponsor, Rep. Aime J. Forand (D., R.I.)—was by far the most controversial issue. It came up repeatedly and each time was the signal for either sharp questions or praise from Mr. Forand, depending on what the particular witness thought about the bill.

At the end of the hearings, it appeared that a majority of the committee was not inclined to press for enactment of the Forand bill, although there remained the possibility of sentiment change. At this writing, the prospect is that a bill may be enacted to raise both social security and old-age assistance payments, with a $600 increase in the amount of taxable salary or self-employment income to meet the extra OASI cost; public assistance payments came out of general revenue.

What did the Forand hearings produce?

For one thing, the proponents and opponents lined up in columns to be identified. The one important exception was the American Hospital Association. The AHA specifically opposed the Forand bill "at this time," but left itself room for maneuvering.

The hospital witnesses, Ray Amberg, president-elect of the AHA, and Dr. James P. Dixon, chairman of its committee to study health needs of the aged, said their conclusion was that federal help of some sort was needed to finance the health care of the aged, and that the social security approach might be the ultimate decision.

However, for the present the hospital spokesmen proposed that the Ways and Means Committee set up a special advisory committee—health personnel and others—to bring together all information on the health problems of the aged, study the data and make recommendations to the committee before January 1, 1960.

American Medical Association led the parade of opponents of the Forand bill, and its witnesses, Drs. Leonard Larson, a trustee, and Frank Krusen of the Mayo clinci, were subjected to close but not unfriendly questioning by Mr. Forand.

At one point Dr. Larson, the new chairman of the AMA Board of Trustees, told Mr. Forand: "As chairman, I shall devote all my energies to solving this problem and other problems of medical care plans in general. This is my primary interest. I rise or fall on what happens in this field."

Lined up with the AMA in opposing the Forand plan (in addition to the AHA) are the American Dental Association, Blue Shield, the insurance industry in general, the U. S. Chamber of Commerce and a number of other business and professional groups.

The AFL-CIO appears to be the backbone of forces working for the Forand bill. Labor's spokesmen, however, have the backing of several welfare organizations (plus the Illinois and Massachusetts welfare directors), the American Nurses Association and the Physicians Forum, among others. The latter group also informed the committee that it favors compulsory social security coverage for physicians.

Notes

A highlight of a testimonial luncheon for Surgeon General Burney was the first public appearance of Dr. Gunnar Gundersen as new AMA President. Dr. Gundersen praised Dr. Burney as a public health officer and as a government official who did not lose contact with the private medical community. The affair was in recognition of Dr. Burney's election as president of the World Health Assembly.

* * *

For the time being, neither doctors nor hospitals will have the exclusive radio frequencies they are attempting to obtain. They were temporarily turned down by the Federal Communications Commission in one category, but will continue their efforts to obtain the frequencies for emergency as well as day-to-day communications.

* * *

It was late in the session before Congress indicated it would continue the Hill-Burton program; legislation virtually certain of enactment would extend the operation for three years, and authorize long-term loans to non-profit sponsors who for religious or other reasons do not want federal grants.

* * *

Internal Revenue Service has ruled that physicians on full-time staff basis with hospitals do not have to include in their U. S. income tax returns money received from patients, when the checks are indorsed over to the hospital.

* * *

While avoiding "campaigning against smoking," the U. S. Public Health Service is going to pass on to the public all the information it has on the subject. Its most recent effort in this direction was release of a report, based on studies of 200,000 veterans, that showed a much higher death rate for "cigarette only" smokers.

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'Clopane Hydrochloride' (Cyclopentamine Hydrochloride, Lilly)	12.5 mg.

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The JOURNAL of the
Kentucky State Medical Association

ISSUED MONTHLY UNDER THE DIRECTION OF THE COUNCIL

VOL. 56 AUGUST, 1958 No. 8

Officers Of Kentucky State Medical Association



EDWARD B. MERSCH, M.D.

President

ROBERT W. ROBERTSON, M.D.
President-Elect

Doctor Robertson, Paducah, a member of the State Board of Health since 1948 and a director of Kentucky Physicians Mutual since 1950, will take the oath of office as President of the Kentucky State Medical Association at the 1958 Annual Meeting in September.

Now a practicing surgeon in Paducah, Doctor Robertson was born in Elizabethtown on December 6, 1903 and attended grade and high school there. In 1925, he graduated from Centre College with an A. B. degree. After two years at the University of Louisville School of Medicine, he completed his medical training at Loyola University in Chicago—graduating in 1931 with an M.D. degree.

Following graduation, he took a rotating internship of one year at the Louisville General Hospital. Then, from 1932 to 1934 he was a resident physician at Riverside Hospital, Paducah. For the next six years, he was surgical assistant to E. W. Jackson, M.D., Paducah, as a preceptorship in surgery. Currently, he serves on the staffs of the Riverside and Western Baptist Hospitals in Paducah.

He married Helen Dunbar in 1938. They have four children—one daughter and three sons.

During World War II, Doctor Robertson was a Major in the Army Medical Corps and member of the Second Auxiliary Surgical Group. He waded in with the rangers at Anzio, and performed the first operation on the beachhead. With his team he went on detached service to the British Army and spent 4½ months of the Battle of Anzio in the British Field Hospital. For this service, he received the Order of the British Empire Medal from Sir Harold Alexander, Supreme Commander of the Mediterranean area. His tour of duty included a year in North Africa and two years in Italy.

A past president of the Kentucky Surgical Society, Doctor Robertson has been active in medical and community organizations. He has served on various KSMA committees—including the Committee on Public Information and Service.

Doctor Robertson is a fellow of the American College of Surgeons and a member of the McCracken County Medical Society, the Southeastern Surgical Congress, the Southern Surgeons Travel Club, and the Excelsior Surgical Society. An elder of the First Presbyterian Church in Paducah, he is also a member of the Rotary Club.

His interest in the health and welfare of his community, his loyalty and service to his profession, and the many demonstrations of his ability as a leader throughout the years, made him a logical choice for president-elect. Doctor Robertson's selection for this high position by the House of Delegates, indicates its faith that he will uphold the traditionally high standards of his office.

Vice Presidents

JOHN S. HARTER, M.D.
Louisville

A graduate of Washington University Medical School in St. Louis in 1928, Doctor Harter



is an associate professor of surgery at the University of Louisville School of Medicine and chief of thoracic surgery at Louisville General Hospital.

In 1957-58 he served the Jefferson County Medical Society as president and was also president of the Southern Thoracic Surgical Association. He is a past president of both the Kentucky and the Southern Chapters of the American College of Chest Physicians. Doctor Harter is a founder-member of the American Board of Thoracic Surgery and a Diplomate of the American Board of Medical Examiners.

He took his internship training at Barnes Hospital in St. Louis and Strong Memorial Hospital in Rochester, New York. Doctor Harter was a resident in surgery at Massachusetts General Hospital and was a fellow of thoracic surgery at the Lahey Clinic, Boston. He is a member of the Board of Governors of the Jefferson County Medical Society.



Robert W. Robertson

PRESIDENT KENTUCKY STATE MEDICAL ASSOCIATION 1958

RICHARD G. ELLIOTT, M.D.
Lexington

A native of Lexington, Doctor Elliott received his A.B. from the University of Kentucky in 1928 and his M.D., from Vanderbilt University School of Medicine in 1932. After completing internship at Charity Hospital in New Orleans and residency training at Children's hospitals in Cincinnati and Philadelphia, he started practicing in Lexington in 1935.



Doctor Elliott was certified by the American Board of Pediatrics in 1937 and is also a member of the American Academy of Pediatrics, and is Past President of the Fayette County Medical Society, and a member of the Southern Medical Association. During World War II he served four years with the U. S. Army and is a Colonel in the Medical Corps USAR, retired.

Active in community affairs, he is a member of the Rotary Club. He has served the Association in various capacities. He is and has been for the past three years, Chairman of the KSMA Committee on Public Information and Service and the Senior Day Committee.

WALTER R. BYRNE, SR., M.D.
Russellville

A graduate of the University of Louisville School of Medicine in 1940, Doctor Byrne is the fourth Walter Byrne to practice in Russellville. He is past president of the Logan County Medical Society and the past president of the Sixth Councilor District.



Doctor Byrne interned at Rex Hospital in Raleigh, North Carolina. He served in the U. S. Army Air Force from 1941 to 1946 and in the U. S. Air Force from 1950 to 1951 as a Lieutenant Colonel.

A native Kentuckian, Doctor Byrne was born in Russellville in 1914. He took his premedical training at the University of Kentucky graduating with a B. S. degree in 1936. He has been active in medical affairs since starting his practice and has served the KSMA on various committees.

Secretary
WOODFORD B. TROUTMAN, M.D.
Louisville

In 1956, Doctor Troutman was elected by the House of Delegates to serve out the unexpired term of Bruce Underwood, M.D., who resigned. His term in that office will expire this year.

Before Doctor Troutman took over as Secretary, the offices of secretary and editor were combined. By-law changes passed by the House in 1956 separated the two offices.

Treasurer
WOODFORD B. TROUTMAN, M.D.
Louisville

Now in his twelfth year of service to the Association as treasurer, Doctor Troutman has efficiently carried out the duties of that office since 1946.



A graduate of the University of Louisville School of Medicine in 1921, he interned at McKeesport in Pennsylvania and at Bellevue Hospital in New York. Doctor Troutman was born in Shepherdsville and started the general practice of medicine in Louisville.

After five years in Louisville, he took postgraduate training in cardiology in Vienna, London, and Edinburg. Upon completing this advanced training he returned to Louisville in 1930 and began limiting his practice to cardiology.

During World War II he was a Lieutenant Colonel in the Army Air Force from 1942 to 1945. He is a Fellow of the American College of Physicians.

Editor
GUY AUD, M.D.
Louisville

Doctor Aud has served as editor of the Journal of the KSMA since 1956 when by-law

changes passed by the House of Delegates separated the offices of secretary and editor.



His experience as head of the Advisory Committee to the Editor made him a logical choice for the position and his election was by unanimous vote of the Council. Under his leadership, the Journal has continually improved in both format and content.

A former president of the Association, Doctor Aud is also a past president of the American Cancer Society. He is a native Kentuckian and a graduate of the Louisville Medical School in 1909. Throughout the years, he has been active in KSMA affairs, having served as a District Councilor and as chairman of the By-Laws Committee. He has also participated in the activities of the Jefferson County Medical Society.

Speaker

CLYDE C. SPARKS, M.D.
Ashland

A native of Lawrence County, Doctor Sparks graduated from the University of Louisville School of Medicine in 1932. The son of a country doctor, after his graduation from Georgetown College in 1924 he taught at Campbellsville Junior College for three years before entering medical school.



Doctor Sparks served the Association as president in 1955 and prior to that time was Chairman of the KSMA Council. He is a charter member and past president of the Kentucky Obstetrical and Gynecologic Society, a member of the Southeastern Surgical Congress, and a Fellow of the American College of Surgeons.

After practicing in Fleming, Kentucky, for a while following two years on the surgical house staff of the Louisville City Hospital (now General Hospital), he started practicing in Ashland in 1936. During World War II, he served three and a half years in the U. S. Navy. He is active in civic and medical society affairs in Boyd County.

Vice Speaker

GEORGE W. PEDIGO, JR., M.D.
Louisville

Long active in KSMA and Jefferson County Medical affairs, Doctor Pedigo was elected vice speaker two years ago. He graduated from the University of Louisville School of Medicine in 1938 and completed his residency and internship in Louisville at General Hospital.



A member of the faculty of the University of Louisville Medical School and an internist with a private practice, Doctor Pedigo is a member of the American College of Physicians, a diplomate of the American Board of Internal Medicine, and a past president of the Louisville Society of Internal Medicine.

He has been secretary and treasurer of the Jefferson County Medical Society and has served the Society as chairman and member of numerous committees. Doctor Pedigo is also a past president of the St. Joseph Infirmary Medical Staff.

Delegates to the AMA

W. VINSON PIERCE, M.D.
Covington

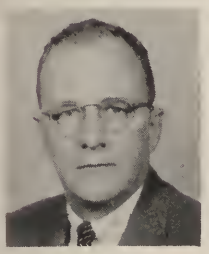
Delegate to the AMA for the past three years, Doctor Pierce is a native of Catlettsburg. He was named Delegate by the KSMA House of Delegates in 1955, after serving as an Alternate Delegate.



A graduate of the University of Louisville School of Medicine in 1934, Doctor Pierce interned at St. Elizabeth Hospital in Covington and General Hospital in Louisville, where he also took residency training in urology.

Doctor Pierce is a past president of the Kentucky Surgical Society, the Kentucky Chapter, American College of Surgeons, and Kentucky Physicians Mutual, Inc.—Kentucky's Blue Shield Plan. During World War II, he was a major in the medical corps.

ROBERT C. LONG, M.D.
Louisville



Chairman of the KSMA's Committee on Medicare, Doctor Long was appointed KSMA Delegate to the AMA in December 1957 to fill out the unexpired term of Clark Bailey, M.D., Harlan, who died on November 20.

A graduate of the University of Louisville School of Medicine in 1940, Doctor Long is currently president of the Louisville Obstetrical and Gynecological Society. He has served the Jefferson County Medical Society the past three years as chairman of its Arbitration Committee, and last year was chairman of he Society's polio program when 60,000 received shots.

The co-author of three articles currently being published on "Ovarian Endocrinology," Doctor Long is a member of the Louisville Medical Forum and Transylvania. He took his internship at Louisville General Hospital and his residency training in obstetrics and gynecology at Louisville General Hospital.

KSMA House of Delegates to Meet at Brown in Roof Garden

Endeavoring to provide for greater comfort and convenience for the membership of the House of Delegates, the Council of KSMA has arranged for the two sessions of the 1958 House of Delegates to be held in the air-conditioned Roof Garden of the Brown Hotel.

A second inovation is also planned, according to Clyde C. Sparks, M.D., Ashland, Speaker of the House. Both meetings of the Delegates, the first meeting Monday evening, September 22, and the second meeting Wednesday evening, September 24, will be preceded by subscription dinners for the officers and delegates which will start promptly at 6 p.m.

Delegates may register in the hall outside of the Roof Garden and receive their badges beginning at 5:30 p.m. Dinner tickets may be purchased at the registration desk, Doctor Sparks said. Both dinners will start at 6 p.m. and both meetings at 7 p.m., and all times are Central Daylight Saving.

At the first session on Monday evening, business will be concerned chiefly with reports of Officers and Committees, and the submitting of resolutions. All reports and resolutions will be assigned at that time to Reference Committees which will consider them the next afternoon, September 23, at the Columbia Auditorium.

The second meeting will concern itself with hearing the Reference Committee reports, acting on them, and electing officers and councilors for the ensuing year.

George W. Pedigo, Jr., M.D., Louisville, Vice Speaker of the House, will assist Doctor Sparks in running the meeting.

Following are the KSMA delegates and the counties they represent:

County	Delegates
Adair:	M. C. Loy, Columbia
Allen:	Owen Davis, Scottsville
Anderson:	Boyd Caudill, Lawrenceburg
Ballard:	Goodloe Sargent, Barlow
Barren:	William Bryant, Glasgow
Bath:	
Bell:	Charles B. Stacy, Pineville
Boone:	Gladys L. Rouse, Florence
Bourbon:	I. Zapolsky, Paris
Boyd:	Philip J. Winn, Ashland
	W. V. Lyon, Ashland
Boyle:	Chris Jackson, Danville
Bracken:	Carl A. Marquardt, Augusta
Breathitt:	F. C. Lewis, Jackson
Breckinridge:	W. R. Morris, Cloverport
Bullitt:	
Butler:	D. G. Miller, Morgantown
Caldwell:	B. K. Amos, Princeton
Calloway:	Conrad H. Jones, Murray
Campbell-Kenton:	Walker Air, Ludlow
	John Cassidy, Covington
	Carl Kumpe, Ft. Mitchell
	Marc Reardon, Covington
	Richard Rust, Newport
Carlis'e:	John T. O'Neill, Arlington
Carroil:	H. C. Boylen, Carrollton
Carter:	J. Watts Stovall, Grayson
Casey:	
Christian:	James Dade, M.D., Hopkinsville
	Robert Coleman, Hopkinsville
Clark:	R. L. Davis, Winchester
Clay:	W. E. Becknell, Manchester
Clinton:	Ernest A. Barnes, Albany
Crittenden:	R. M. Brandon, Marion
Cumberland:	
Daviess:	Charles B. Wathen, Owensboro
Edmonson:	
Elliott:	John F. Greene, Sandy Hook
Estill:	R. R. Snowden, Ravenna
Fayette:	John W. Scott Lexington
	T. L. Adams, Lexington
	Carl H. Fortune, Lexington
	R. C. Blount, Lexington
	T. R. Bryant, Jr., Lexington
	R. G. Elliott, Lexington
	C. C. Johnson, Lexington
	N. L. Bosworth, Lexington

Fleming:	R. W. Fidler, Flemingsburg
Floyd:	George P. Archer, Prestonsburg
Franklin:	Joseph Liebman, Frankfort
Fulton:	R. W. Bushart, Fulton
Gallatin:	G. F. Harris, Warsaw
Garrard:	O. S. Playforth, Lancaster
Grant:	F. R. Scroggin, Dry Ridge
Graves:	Robert A. Orr, Mayfield
Grayson:	Ralph Thomas, Leitchfield
Green:	Robert Shuffett, Greensburg
Greenup:	Billy Riddle, South Shore
Hancock:	
Hardin:	R. T. Routt, Sonora
	William H. Barnard, Elizabethtown
Harlan:	E. M. Howard, Harlan
	Philip J. Begley, Harlan
Harrison:	J. P. Wyles, Cynthiana
Hart:	
Henderson:	Robert L. Sumner, Henderson
Henry:	R. L. Houston, Jr., Eminence
Hickman:	V. A. Jackson, Clinton
Hopkins:	Loman C. Trover, Earlington
Jackson:	
Jefferson:	John D. Allen, Jr.
	William H. Bizot
	Henry S. Collier
	Richard F. Greathouse
	Blaine Lewis, Jr.
	Robert S. Tillett
	Homer B. Martin
	Robert F. Monroe
	Everett N. Rush
	L. Douglas Atherton
	McHenry S. Brewer
	W. Burford Davis
	Robert S. Dyer
	J. Thomas Giannini
	Robert Lich, Jr.
	Thomas M. Marshall
	L. H. Segerberg
	Carroll L. Witten
	Benjamin D. Boone
	Thomas V. Gudex
	Roy A. Martin
	Max P. Jones
	Robert L. McClendon
	Alfred O. Miller
	F. Albert Olash
	William E. Oldham
	Rudolph F. Vogt
Jessamine:	J. S. Williams, Nicholasville
Johnson:	James W. Archer, Paintsville
Knott:	Gene T. Watts, Hindman
Knox:	W. P. Clifton, Barbourville
Larue:	J. D. Handley, Hodgenville
Laurel:	Boyce E. Jones, London
Lawrence:	
Lee:	
Leslie:	
Letcher:	T. M. Perry, Jenkins
Lewis:	
Lincoln:	H. I. Frisbie, Stanford
Livingston:	Roy Waddell, Salem
Logan:	C. V. Dodson, Russellville
Lyon:	John E. Cotthoff, Kuttawa
McCracken:	Walter Johnson, Paducah
	Walker Turner, Paducah
	Leon Higdon, Paducah
McCreary:	M. D. Haley, Stearns
McLean:	W. Gerald Edds, Calhoun
Madison:	Douglas Jenkins, Richmond
Magoffin:	
Marion:	David Drye, Bradfordsville
Mason:	William Cartmell, Maysville
Marshall:	J. R. Miller, Benton
Martin:	
Meade:	George Clark, Brandenburg
Menifee:	D. L. Graves, Frenchburg
Mercer:	T. O. Meredith, Harrodsburg
Metcalfe:	E. S. Dunham, Edmonton
Monroe:	C. A. Crabtree, Gamaliel
Montgomery:	William McKenna, Mt. Sterling
Morgan:	Hershell B. Murray, West Liberty
Muhlenberg:	G. L. Simpson, Greenville
Nelson:	T. G. Forsee, Bardstown
Nicholas:	
Ohio:	Albert H. Joslin, Beaver Dam
Oldham:	Edward G. Houchin, LaGrange
Owen:	O. A. Cull, Owenton
Owsley:	M. B. Gabbard, Booneville
Pendleton:	William M. Townsend, Falmouth
Perry:	C. D. Snyder, Hazard
Pike:	
Powell:	S. T. Scrivener, Stanton
Pulaski:	Brent Weddle, Somerset
Robertson:	Perry Overby, Mt. Olivet
Rockcastle:	Walker Owens, Mt. Vernon
Rowan:	
Russell:	
Scott:	H. G. Wells, Georgetown
Shelby:	M. D. Klein, Shelbyville
Simpson:	L. F. Beasley, Franklin
Spencer:	M. H. Skaggs, Taylorsville
Taylor:	H. F. Chambers, Campbellsville
Todd:	J. C. Woodall, Trenton
Trigg:	Thornton Bryan, Jr., Cadiz
Trimble:	Carl Cooper, Bedford
Union:	
Warren:	Harold Keen, Bowling Green
	Harper Wright, Bowling Green
Washington:	M. A. Coyle, Springfield
Wayne:	Mark Roberts, Monticello
Webster:	
Whitley:	W. M. Buttermore, Corbin
Wolfe:	Paul F. Maddox, Campton
Woodford:	F. D. Willey, Versailles

Hear . . .

Clarence Manion

President's Luncheon

September 24

KSMA Officers for 1958-59 Elected by House on September 24

KSMA officers for 1958-59 to be elected by the House of Delegates at its second session on Wednesday, September 28 are:

President-Elect: (Central Section) one year.

Vice Presidents: (Central, Eastern, and Western Sections) one year.

Secretary: (Woodford B. Troutman, M.D., Louisville, incumbent) five years.

Treasurer: (Woodford B. Troutman, M.D., Louisville, incumbent) five years.

Delegate to the AMA: (Robert C. Long, M.D., Louisville, incumbent) two years.

Alternate Delegate to the AMA: (George Archer, M.D., Prestonsburg, incumbent) two years.

According to provisions of the By-laws, the Nominating Committee which was named in 1957, will announce its candidates at the beginning of the Second Scientific Session on Tuesday, September 23. Voting on these nominees will take place at the second session of the House of Delegates on Wednesday, September 24. Further nominations may be made from the floor, but must be made without discussion.

Council to Report to KSMA House on September 22

The important actions of the Council during the past year and its recommendations on matters to be acted upon by the House, will be included in the Report of the Council to the House of Delegates for 1958, according to Walter L. O'Nan, M.D., Henderson.

As a result of a vote by the 1956 House, the report of the Council has been streamlined and a digest of each Council meeting has been carried in various issues of the Journal of the KSMA. This method gives a more up-to-date accounting of Council action to all KSMA members, Doctor O'Nan said.

During 1957-1958, the KSMA Council has held four meetings, the Executive Committee has met three times, and the Budget Committee has met once. Digests of Council minutes have been carried in the February and June Journals, and the digest of the July 31 meeting will appear in a forthcoming issue.

Councilors re-elected to the House for their first full three year terms at the 1957 session were: Carlisle Morse, M.D., Louisville, Fifth District, and Norman Adair, M.D., Covington, Eighth District.

Newly elected Councilors at that session were: John P. Glenn, M.D., Russellville, who was elected to succeed L. O. Toomey, M.D., Bowling Green, in the Sixth District; Joe M. Bush, M.D., Mt. Sterling, who was chosen to succeed Hugh Mahaffey, M.D., Richmond, in the Eleventh District; and Keith P. Smith, M.D., Corbin, who succeeds Charles B. Stacy, M.D., Pineville.

Brief biographical sketches of the three new councilors follow.

JOHN P. GLENN, M.D.
Russellville
Sixth District

A native of Todd County, Doctor Glenn served the KSMA as Vice President from the Western part of the State in 1950-51 and was a member of the House of Delegates, representing Logan County, from 1936-1956—except for four years when he was on duty with the U. S. Navy.

Doctor Glenn, who graduated from the University of Louisville School of Medicine in 1932 served as a Lieutenant Commander in the Navy from 1942-46. With the exception of that period of absence, he has practiced in Logan County since 1935 and has been on the surgical staff of the Logan County Hospital since 1936.

He has long been active in the Logan County Society as well as the KSMA. Doctor Glenn is a member of the American College of Surgeons and of the Southeastern Surgical Congress.

J. M. BUSH, M.D.
Mt. Sterling
Eleventh District

President of the Montgomery County Medical Society, Doctor Bush, a native of Mt. Sterling, is also a past president of the Kentucky Academy of General Practice. He received his medical training at the University of Louisville School of Medicine, graduating in 1931.

While on duty with the U. S. Medical Corps, he took special training in radiology interpretation at the University of Tennessee. After discharge he went to the University of Pennsylvania for further study.

Doctor Bush is on the Advisory Committee

of the University of Kentucky Medical School and had served the Montgomery County Medical Society as secretary for five years prior to his election as president. He is a member of the Southern Medical Association.

KEITH P. SMITH, M.D.
Corbin
Fifteenth District

Doctor Smith, who at one time served concurrent terms as vice president (Eastern) of the KSMA and president of the Kentucky Academy of General Practice, graduated from the University of Louisville Medical School in 1936.

After internship at St. Elizabeth Hospital, Covington, he became associated with his father, F. S. Smith, M.D., in the Smith Hospital in Corbin. After his father's death and when the new Municipal Hospital was opened he closed the private hospital, and was elected the first chief of staff at the new hospital.

He did postgraduate work in surgery at Cook County Hospital in Chicago and served 42 months in the U. S. Air Force during World War II, receiving his discharge with the rank of major. Doctor Smith has served the Whitley County Medical Society in many capacities, and is a member of the Kiwanis Club, and president of the Corbin Deposit Bank.

Reference Committees Appointed By Speaker of the House

Reference Committees handling the business of the 1958 session of the House of Delegates will continue to meet at the Columbia Auditorium at 2 p.m. on Tuesday, September 23, while the House itself will meet in the Roof Garden at the Brown Hotel.

This announcement was made by Clyde C. Sparks, M.D., Ashland, Speaker of the House. The Reference Committee rooms at the Columbia Auditorium may be approached at the west end of the technical exhibit hall.

At the first meeting of the House on September 22 all officer, committee reports and resolutions will be referred to one of the seven Reference Committees by the Speaker.

On Tuesday afternoon, September 23, at 1:45 p.m. all Reference Committee members are asked to assemble for a short briefing session before the seven Reference Committees go into session at 2 p.m. for their individual hearings.

Any member of the Association who would like to testify on any report or resolution assigned to any one of the seven Reference Committees is urged to do so, Doctor Sparks said. Open hearings for each of the Reference Committees last at least one hour, or longer if necessary, in order that all who wish to speak may be heard.

Should any KSMA member not know which Reference Committee is to act on matters in which he is interested, he may inquire from any of the Association officers or the Headquarters Office. **"Since the House of Delegates is the policy-making body of the Association, the KSMA official family is most anxious for every member who wishes to speak on a given issue to have an opportunity to do so," Doctor Sparks said.**

When all who wish to speak have been heard, the Reference Committees will conclude their open hearings and go into executive session to restudy the reports and review the testimony given at the hearing. It is at this time that the committee will formulate its recommendations on the various reports and resolutions assigned to it which will be made at the final session of the House of Delegates, Wednesday evening, September 24, in the Roof Garden at the Brown Hotel.

The following are the seven Reference Committees, the Credentials Committee, and the Alternates for Reference Committees appointed by Doctor Sparks to serve during the 1958 session:

REFERENCE COMMITTEE NO. 1—
Reports of Officers and Councilors
Rudolph F. Vogt, Louisville, Chairman
Loman C. Trover, Madisonville, Vice Chairman
W. Burford Davis, Louisville
Boyce E. Jones, London
James S. Williams, Nicholasville

REFERENCE COMMITTEE NO. 2—
Reports on Medical Care, Medical Education, Hospitals and Related Subjects
Coleman C. Johnston, Lexington, Chairman
Thomas O. Meredith, Harrodsburg, Vice Chairman
R. Ward Bushart, Fulton
Chrisman S. Jackson, Danville
Gladys L. Rouse, Florence

Councilors

First District



J. VERNON PACE
Paducah

Second District



WALTER O'NAN*
Henderson

Third District



RALPH D. LYNN
Elkton

Fourth District



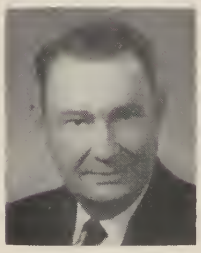
W. KEITH CRUME*
Bardstown

Fifth District



CARLISLE MORSE
Louisville

Sixth District



JOHN P. GLENN
Russellville

Seventh District



B. B. BAUGHMAN*
Frankfort

Eighth District



NORMAN ADAIR
Covington

Ninth District



J. M. STEVENSON
Brooksville

Tenth District



J. F. VAN METER
Lexington

Eleventh District



JOE M. BUSH
Mt. Sterling

Twelfth District



GARNETT J. SWEENEY*
Liberty

Thirteenth District



CHARLES B. JOHNSON
Russell

Fourteenth District



CHARLES C. RUTLEDGE
Hazard

Fifteenth District



KEITH P. SMITH
Corbin

*Member, Executive Committee

*Chairman

REFERENCE COMMITTEE NO. 3—
Reports on Legislation and Public Relations
Elgin S. Dunham, Edmonton, Chairman
Carl H. Fortune, Lexington, Vice Chairman
J. Thomas Giannini, Louisville
John F. Greene, Sandy Hook
Ralph G. Thomas, Leitchfield

REFERENCE COMMITTEE NO. 4—
Reports on Miscellaneous Business
Carl W. Kumpe, Covington, Chairman
Robert S. Dyer, Louisville, Vice Chairman
Walter R. Johnson, Paducah
Albert H. Joslin, Beaver Dam
Max D. Klein, Shelbyville

REFERENCE COMMITTEE NO. 5—
Reports on Miscellaneous Business
O. Leon Higdon, Paducah, Chairman
Wm. E. Oldham, Louisville, Vice Chairman
Marcus A. Coyle, Springfield
Robert L. Davis, Winchester
Brent Weddle, Somerset

REFERENCE COMMITTEE NO. 6—
Reports on Miscellaneous Business
Blaine Lewis, Jr., Louisville, Chairman
W. Gerald Edds, Calhoun, Vice Chairman
Douglas H. Jenkins, Richmond
Frederick R. Scroggin, Dry Ridge
Charles B. Wathen, Owensboro
H. G. Wells, Georgetown

REFERENCE COMMITTEE NO. 7
Reports on Miscellaneous Business
Lillard F. Beasley, Franklin, Chairman
Carl Cooper, Jr., Bedford, Vice Chairman
N. L. Bosworth, Lexington
McHenry S. Brewer, Louisville
Paul F. Maddox, Campton

CREDENTIALS COMMITTEE
Robert A. Orr, Mayfield, Chairman
Billy J. Riddle, South Shore, Vice Chairman
Robert L. Shuffett, Grensburg

ALTERNATES
Millard C. Loy, Columbia
John P. Wyles, Cynthiana
Ludwig H. Segerberg, Louisville
William H. Bizot, Louisville
Richard J. Rust, Newport
Hershell B. Murray, West Liberty
Martin H. Skaggs, Taylorsville
Harold Keen, Bowling Green

Nominating Committee to Meet After First House Session

Interested KSMA members will have an opportunity to confer with the Nominating Committee for General KSMA Officers for 1958-59, immediately following the close of the first session of the House of Delegates Monday evening, September 22, on the Roof Garden of the Brown Hotel, according to an announcement from James W. Archer, M.D., Paintsville, chairman of the Committee.

The location of the second meeting of the Committee will be announced at the close of the first meeting of the House by the Speaker Clyde C. Sparks, M.D. Doctor Archer urged all members interested in the work of the Committee to attend this meeting.

Recommendations of the Committee will be presented just before the opening of the second scientific session at 1:45 p.m. Tuesday, Sept. 23, as called for in the By-laws. At this time, nominees for each office will be announced.

The election of the Association's General Officers will take place on Wednesday evening, September 24, just prior to the close of the House's final session. Before the voting, the recommendations of the Nominating Committee will be read again and other nominations may be made from the floor "without discussion or comment."

Serving with Doctor Archer on the Nominating Committee are: Joe M. Bush, M.D., Mt. Sterling; Howell Davis, M.D., Owensboro; W. V. Lyon, M.D., Ashland; and Carroll Witten, M.D., Louisville.

Five Councilors to be Elected in '58 by House of Delegates

Councilors for five of the 15 KSMA Councilor Districts will be elected by the KSMA House of Delegates at its second session at the Roof Garden of the Brown Hotel, Wednesday, September 24 at 7 p.m., according to an announcment from Walter L. O'Nan, M.D., Henderson, chairman of the Council.

Section I, Chapter V, of the By-Laws states that Councilors are elected for a term of three years and "shall be limited to serving not more than two consecutive terms."

Incumbent councilors are: Walter L. O'Nan, Henderson, Second District; Branham Baughman, M.D., Frankfort, Seventh District; J. M. Stevenson, M.D., Brooksville, Ninth District;

J. Farra Van Meter, M.D., Lexington, Tenth District; and Charles B. Johnson, M.D., Russell, Thirteenth District. Drs. Baughman and Van Meter have served two full terms.

Delegates from the counties in each councilor district will serve as the nominating committee to nominate a councilor for the District concerned. The delegates concerned hold open meetings at locations announced by the Speaker of the House to discuss the nominations. When the nominating committee reports back to the House, additional nominations may be made from the floor by any delegate.

Meeting places for each of the five districts will be announced by the Speaker of the House —Clyde C. Sparks, M.D.—at the close of the first meeting of the House.

1958 Annual Session in Memory of KSMA's 20th President

In tribute to the memory of the KSMA's 20th president who served in 1878, the 1958 Annual Meeting of the Association has been designated the L. P. Yandell Memorial Meeting.

The custom of honoring a past president or some other distinguished Kentucky physician each year was started in 1935, according to Emmet F. Horine, M.D., Brooks, who is preparing a biographical sketch on Doctor Yandell for the program booklet.

Last year's meeting honored R. W. Gaines, M.D., who was president in 1877.

President's Luncheon to be Held in Ballroom of Brown

This year for the first time the President's Luncheon on Wednesday, September 24, at noon, will be held in the Ballroom of the Brown Hotel. Announcement of the change in luncheon place was made by President Edward B. Mersch, M.D., who will preside at the luncheon.

Doctor Mersch said that the Ballroom would be spacious enough so that there would be no need to limit the tickets sold, as in the past when the luncheon was in the Roof Garden. The seating will continue to be a "first-come, first-serve" basis, he said.

Another "first" this year will be the presentation of the three KSMA Awards at the luncheon—two to members and one to a layman. As in the past, presentation will be made by KSMA Secretary Woodford B. Troutman, M.D., Louisville.

Noted Indiana Lawyer to Speak at President's Luncheon

Clarence Manion, a practicing lawyer in South Bend, Indiana, for 25 years who is noted for his speeches and writings on Americanism, will be the guest speaker at the annual President's Luncheon in the Ballroom of the Brown Hotel at 12 noon on Wednesday, September 24.



The winner of Freedoms Foundation Awards for his speeches and writings in 1949, 1950, 1954 and 1955, Mr. Manion is the author of the classic "The Key to Peace," which has been sent to schools throughout the nation as part of the American Legion's Americanization program. His topic at the luncheon will be "The Disease Called Despotism."

A native Kentuckian, Mr. Manion is a member of the law firm of Doran, Manion, Boynton, and Kamm, South Bend, and professor of constitutional law at Notre Dame College of Law. He served as Dean of the Notre Dame College of Law from 1941 to 1952, when he resigned to devote more time to his practice and writing and speaking engagements.

Mr. Manion was appointed by President Eisenhower as chairman of the Commission on Inter - Governmental Relations in 1953 and served a year in that position. He is heard every Sunday evening on the coast to coast Manion Forum radio network and his current book, "Let's Face It" is a compendium of his 1955 radio addresses.

Category 1 Credit Authorized

Color television programs, presented by the University of Louisville School of Medicine will be acceptable for 5½ hours of Category 1 credit for members of the Kentucky Academy of General Practice. The programs, which will originate at General Hospital and be transmitted to the Columbia Auditorium via closed circuit TV, have been carefully planned and are of unusually high calibre. KAGP members will also receive Category 1 credit for attendance at the Academy's specialty group meeting from 2 to 4:30 on Wednesday, September 24.

Guest Speakers

Frank R. Lock, M.D.*
Winston-Salem, N. C.

Moderator of the panel discussion on "The Pregnant Patient" at the general session at 9 a.m., Tuesday, September 23, will be Doctor Lock. He will also give a talk on "Spontaneous and Habitual Abortion" before the general session that afternoon at 2:20 p.m.



He is professor of obstetrics and gynecology at the Bowman Gray School of Medicine, Wake Forest College, and director of obstetrics and gynecology of North Carolina Baptist Hospital, Winston-Salem, N. C. His topic before the Kentucky Obstetrical and Gynecologic Society on Wednesday afternoon at 2:00 p.m. will be "Indications for Operative Treatment in Gynecology.

A graduate of Tulane University School of Medicine in 1935, Doctor Lock is a past secretary of the American Association of Obstetricians and Gynecologists and past chairman of the Section on Obstetrics and Gynecology of the AMA. He is on the Board of Governors of American College of Surgeons, representing the American Gynecological Society.

Jerome Glaser, M.D.*
Rochester, N. Y.

"Symptomatic Treatment of Bronchial Asthma in Infancy and Childhood," is the topic of the talk which Doctor Glaser, clinical associate professor of pediatrics at the University of Rochester School of Medicine and Dentistry, will give at the general session on Thursday, September 25, at 9 a.m.



He will be guest speaker at the specialty group session of the Kentucky Chapter, American Academy of Pediatrics speaking on "Differential Diagnosis of the Eczematoid Dermatitis in Infancy and Childhood" from 2 p.m. to 3 p.m. on Wednesday. He will discuss "The Prophylaxis of Allergic Diseases in Infancy and Childhood" from 3:30 p.m. to 4 p.m. and be available for a question and answer period following his presentation.

Doctor Glaser is the author of more than 80 articles relating to children's diseases and a book published in 1956 on "Allergy in Childhood." He graduated from Cornell University Medical School in 1923 and interned at Michael Reese Hospital in Chicago. After completing residencies in St. Louis and Chicago, he completed a year of graduate study in the pediatric clinics of Berlin and Vienna.

Laurence L. Robbins, M.D.*
Boston, Massachusetts

"The Diagnosis of Infra-Pulmonary Effusion" will be discussed by Doctor Robbins, radiologist-in-chief at the Massachusetts General Hospital and associate clinical professor of radiology at Harvard Medical School, at the general session on Tuesday, September 23 at 11:10 a.m.



Guest speaker of the Kentucky Radiological Society, he will talk on "The Importance of Recognizing the Soft Tissue Abnormalities in Radiological Diagnosis" during its group session on Wednesday, September 24 at 2 p.m.

A native Vermonter, he received his M.D. from the University of Vermont. He interned at Mary Fletcher Hospital in Burlington and completed his residency training there and at Massachusetts General. He was appointed to his present position in 1946. The author of numerous articles, Doctor Robbins is president-elect of the Radiological Society of North

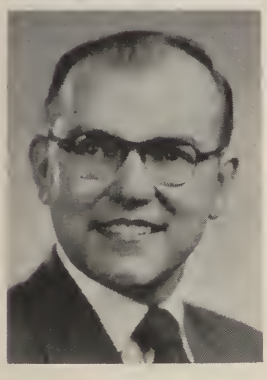
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*Indicates that the speaker in addition to addressing one of the General Scientific Sessions or participating in a panel discussion is also scheduled to speak before one of the specialty Groups on Wednesday afternoon.

America, a trustee of the American Board of Radiology, Society of North America, a trustee of the American Board of Radiology, member of the Board of Chancellors of the American College of Radiology, and a member of the Editorial Board of Radiology.

Harold E. Boyer, D.D.S., M. Sc.D.
Louisville, Kentucky

Doctor Boyer, associate professor and chairman of the department of oral surgery at the University of Louisville, School of Dentistry, is representing the dental profession as a guest speaker at the general session. He will discuss "Oral Manifestations of Systemic Diseases" at 9:20 a.m. on Thursday.



A graduate of the School of Dentistry, University of Pennsylvania, he also attended the Graduate School of Medicine at the University where he got the degree of M. Sc. D. He took his residency in oral surgery at Jackson Memorial Hospital in Miami, Florida.

Chief of oral surgery at Louisville General Hospital, Doctor Boyer also serves as a consultant at Veterans Administration Hospital, Louisville. He is a member of the Southeast Society of Oral Surgeons, American Dental Association, American Dental Society of Anesthesiology, and the Kentucky Dental Association.

Kenneth K. Keown, M.D.*
Columbia, Missouri

Doctor Keown, guest speaker of the Kentucky Society of Anesthesiologists, will participate in a panel discussion on "Geriatrics and Surgery," on Thursday, September 25 at 2 p.m.



A graduate of Hahnemann Medical College and Hospital in Philadelphia in 1941, Doctor Keown is presently professor of anesthesiology at the School of Medicine, University of Missouri. His topic at the specialty group session on Wednesday, September 24, at 3:30 p.m. will be "Total Support During Intra-cardiac Procedures."

He is the author of "Anesthesia for Surgery of the Heart" and has published several articles pertaining to anesthesia for heart and thoracic surgery. Before coming to the University of Missouri, he was staff anesthesiologist at Hahnemann Medical College and Hospital from 1948-1957. Doctor Keown was certified by the American Board of Anesthesiologists in 1951 and is a member of the Board of Governors of the American College of Anesthesiology.

Edward G. McGavran, M.D.*
Chapel Hill, North Carolina

Dean of the School of Public Health at the University of North Carolina since 1947, Doctor McGavran, guest speaker of the Kentucky Public Health Physicians, will discuss "Public Health and Medical Practice" before the general session at 10:50 a.m. on Tuesday, September 23.



Doctor McGavran has been on the governing council of the American Public Health Association and has served eight years on the executive committee of that organization. During 1952, he was in Europe serving as U. S. Delegate to the World Health Conference, Geneva, Switzerland.

His talk before the specialty group on Wednesday at 3:30 p.m. will be entitled, "The Community as a Patient." He will also participate in a panel discussion on "The Pregnant Patient" at the general session on Tuesday, September 23, at 9 a.m. Before coming to Chapel Hill, Doctor McGavran was professor of preventive medicine and public health in the University of Kansas Medical School, Health Commissioner of St. Louis County, Missouri, and professor of Public Health and Preventive Medicine at Washington University Medical School.

Kenneth L. Craft, M.D.*
Indianapolis, Ind.

A native of Indianapolis, Doctor Craft is assistant professor of Otolaryngology at Indiana University School of Medicine where he received his M.D. degree in 1916. He is scheduled to address the general session on the opening day of the meeting at 10:30 a.m. when his subject will be "Allergy in General Practice."



Guest speaker of the Kentucky Eye, Ear, Nose and Throat Society, his topic at the section meeting of the Society on Wednesday at 3:30 p.m. will be, "The Relation of Allergy to Opthalmology and Otolaryngology."

Doctor Craft is a Diplomate of the American Board of Otolaryngology, member of the Board of Regents of the American College of Allergists, President of the Board of Trustees of Hansel Foundation of Medical Otolaryngology, and Editor of Transactions of Indiana Academy of Ophthalmology.

He is a past president of the American Society of Ophthalmologic and Otolaryngologic Society, past vice president of the American Academy of Ophthalmology and Otolaryngology, and former vice chairman of the section of Otolaryngology of the American Medical Association.

George J. Hamwi, M.D.*
Columbus, Ohio

Guest speaker of the Kentucky Chapter, American College of Physicians, Doctor Hamwi will participate in a panel at 9 a.m. on Tuesday, September 23, on "The Pregnant Patient." That afternoon he will present a paper before the general session at 2 p.m. on "Endocrinology for the General Practitioner."



His topic at the specialty session of the College of Physicians on Wednesday, September 24 at 2:15 p.m. will be "Recent Concepts in the Diagnosis and Treatment of Thyroid Disorders." He is associate professor of medicine and head of the division of endocrinology and metabolism of the department of medicine, College of Medicine, Ohio State University.

Co-author of numerous scientific articles, Doctor Hamwi is a diplomate of the American Board of Internal Medicine, a member of the International Society of Internal Medicine, and the American Federation of Clinical Research. He graduated from the American University of Beirut with an M.D. degree in 1940.

Brig. Gen. James H. Forsee*
Washington D. C.

General Forsee, chief of the department of surgery and chief of professional services at Walter Reed Hospital, Washington, D. C., will appear on the Annual Meeting program as the guest of the Kentucky Chapter, American College of Surgeons. During the general session on Thursday, he will take part in a panel on "Geriatrics and Surgery" at 2 p.m.



A graduate of Washington University Medical School in 1929, General Forsee is a Diplomate of the American Board of Surgery and the Board of Thoracic Surgery. His topic before the College of Surgeons specialty meeting on Wednesday afternoon at 3:30 p.m. will be "Closed Chest Injuries — Recognition and Management."

He is the author of the book "The Surgical Treatment of Pulmonary Tuberculosis" published in 1954 and more than 80 articles which have appeared in U. S. and foreign medical Journals. General Forsee interned and took his postgraduate training at Fitzsimmons Army Hospital and later served there as chief of its surgical service.

All KSMA members and guests are urged by the Committee on Scientific Assembly and Arrangements to wear their badges at all times while attending the Annual Meeting on September 23, 24, and 25.

George J. Garceau, M.D.*
Indianapolis, Indiana

A graduate of Northwestern University School of Medicine in 1925, Doctor Garceau, who will be the guest of Kentucky Orthopaedic Society, will take part in a panel discussion on "Geriatrics and Surgery" at the general session on Thursday, September 25, at 2 p.m.

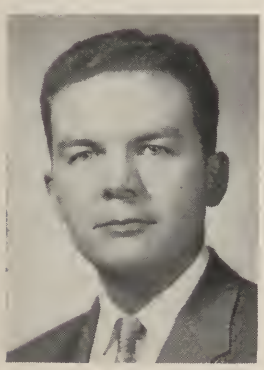


He is professor and chairman of the department of Orthopaedic Surgery, Indiana University School of Medicine, and a member of the Clinical Orthopaedic Society. His topic at the specialty group meeting on Wednesday, September 24 will be "Plantar Denervation for Pes Cavus."

Doctor Garceau is a member of numerous orthopaedic societies including: The American Academy of Orthopaedic Surgeons, International College of Surgeons, International Orthopaedic Society, and the American Orthopaedic Association.

Dwight C. McGoon, M.D.
Rochester, Minnesota

"Open Heart Surgery" will be the subject of the talk which Doctor McGoon, consultant in general surgery at the Mayo Clinic in Rochester, will make at the general session on Thursday, September 25 at 9:40 a.m.



A 1948 graduate of Johns Hopkins University, Baltimore, Md., Doctor McGoon completed a six year training program in surgery at the Johns Hopkins Hospital in 1954. The first year he served a straight surgical internship and the last year he served in the capacity of chief resident. Doctor McGoon will be the guest of the Kentucky Chapter, American College of Chest Physicians.

Following the completion of his postgraduate program, he was a captain in the USAF, serving as chief surgical consultant to the Air Force in Europe from 1954 to 1956. He joined the Mayo Clinic in 1957 with his present title. Doctor McGoon is a member of the American Board of General Surgery and the American College of Surgeons.

Oglesby Paul, M.D.*
Chicago, Illinois

Guest of the Kentucky Academy of General Practice, Doctor Paul is a graduate of Harvard Medical School in 1942 and is presently Clinical Associate Professor of Medicine at the University of Illinois College of Medicine.



He will participate in the four-man panel discussion on "Geriatrics and Surgery" during the general session on the closing day of the meeting at 2 p.m. "Cardiovascular Complications of Diabetes" will be his topic of discussion before the KAGP group at its specialty meeting on Wednesday afternoon at 3:30 p.m.

Doctor Paul is chief of the Cardiac Clinic of the Presbyterian Hospital in Chicago. He is currently serving as a vice president of the Chicago Heart Association and the American Heart Association. After receiving his M.D. degree he interned and took a cardiac residency at Massachusetts General Hospital in Boston. He is Certified by the Board of Internal Medicine.

Donald M. Hamilton, M.D.*
White Plains, N. Y.

Guest Speaker of the Kentucky Psychiatric Association, Doctor Hamilton will address the general session on "The Problem of Suicide in General Practice" at 2:40 p.m. on Tuesday, September 23. He will also participate in a panel on "The Pregnant Patient" on Tuesday morning at 9 a.m.



He is in charge of the Men's Division of

the New York Hospital—Westchester Division, and is a diplomate in psychiatry of the American Board of Psychiatry and Neurology. He also serves as secretary of the American Psychopathological Association, Inc. and secretary of the New York Psychiatric Society.

Doctor Hamilton graduated from the University of Pennsylvania Medical School in 1933, and was a co-winner of an undergraduate research prize in his second year. He is the author of numerous articles on psychiatric subjects. His topic before the specialty group at 3:30 on Wednesday will be," The Changing Picture of Dementia Praecox."

Pathologists Join Specialty Groups Meeting on Sept. 24

This year the Kentucky Society of Pathologists will be among the specialty groups holding meetings on Wednesday, September 24, in conjunction with the annual meeting.

The addition of this new group brings the number of specialty groups participating to 13 —the largest number ever to hold simultaneous programs during the Wednesday afternoon portion of the meeting.

Specialty group presidents have extended a cordial invitation to all physicians to attend the meetings and have stressed the fact that they are welcome to go from one meeting to another throughout the afternoon.

President Edward B. Mersch, M.D., Covington, Chairman of the Committee on Scientific Assembly and Arrangements, said that the group sessions are aimed at giving the men who limit their practices an opportunity to get the latest and most specialized knowledge on happenings in their particular fields.

Other specialty groups meeting include: Kentucky Society of Anesthesiologists; Kentucky Chapter, American College of Chest Physicians; Kentucky Eye, Ear, Nose, and Throat Society; Kentucky Chapter, American Academy of General Practice; Kentucky Obstetrical and Gynecologic Society; Kentucky Orthopaedic Society; Kentucky Chapter, American Academy of Pediatrics, Kentucky Chapter, American College of Physicians, Kentucky Psychiatric Association; Kentucky Public Health Physicians, Kentucky Radiological Society and Kentucky Chapter, American College of Surgeons.

Nine of the groups will be holding sessions in the newly remodeled, air conditioned First Christian Church.

Panel Discussions to be Featured at 1958 General Session

Guest speakers from throughout the nation representing eight specialty groups will participate in two panel discussions which will highlight the opening and closing sessions of the 1958 Annual Meeting.

The two panels, covering subjects calculated to appeal to the majority of Kentucky physicians, were announced by Edward B. Mersch, M.D., Covington, chairman of the Committee on Scientific Assembly and Arrangements.

He said the decision to feature two panel discussions at the '58 meeting came about because of the popularity of the panel on "Hyperthyroidism" at last year's meeting.

Frank R. Lock, M.D., Winston-Salem, N. C., guest of the Kentucky Obstetrical and Gynecologic Society, will moderate the opening panel on "The Pregnant Patient" at 9 a.m. on Tuesday, September 23.

Participants will include: George J. Hamwi, M.D., Columbus, Ohio, guest of the Kentucky Chapter, American College of Physicians; Donald Hamilton, M.D., White Plains, N. Y., guest of the Kentucky Psychiatric Society; and E. G. McGavran, M.D., Chapel Hill, N. C. guest of the Kentucky Public Health Physicians.

"Geriatrics and Surgery" is the topic to be discussed by members of the panel at the Thursday session at 2 p.m. Moderator of the discussion will be Arnold Griswold, M.D., Louisville surgeon.

Other panel members are: Kenneth K. Keown, M.D., Columbia, Missouri, guest of the Kentucky Society of Anesthesiologists; Oglesby Paul, M.D., Chicago, Illinois, guest of the Kentucky Academy of General Practice; George A. Garceau, M.D., Indianapolis, Indiana, guest of the Kentucky Orthopaedic Society, and Brigadier General James Forsee, Washington, D. C., guest of the Kentucky Chapter, American College of Surgeons.

See You at the

Annual Meeting

September 23, 24 and 25

Annual Meeting Program Summary

The Kentucky State Medical Association

September 22, 23, 24, and 25, 1958

Louisville

MONDAY, SEPTEMBER 22

12:00 noon	Council Meeting	Louis XVI Room, Brown Hotel
5:30 p. m.	Registration House of Delegates	Roof Garden, Brown Hotel
6:00 p. m.	Subscription Dinner—House of Delegates	Roof Garden, Brown Hotel
7:00 p. m.	First Meeting of House of Delegates	Roof Garden, Brown Hotel

TUESDAY, SEPTEMBER 23

8:00 a. m.	Registration	Columbia Auditorium
8:45 a. m.	Opening Ceremonies	Columbia Auditorium
9:00 a. m.	First Scientific Session Panel Discussion, 9:00 to 10:00 Scientific Papers, 10:30 to 11:30	Columbia Auditorium
11:30 a. m.	President's Address	Columbia Auditorium
2:00 p. m.	Second Scientific Session Scientific Papers, 2:00 to 3:00 Color Television, 3:30 to 5:00	Columbia Auditorium
2:00 p. m.	Reference Committee Meetings	Columbia Auditorium

WEDNESDAY, SEPTEMBER 24

9:00 a. m.	Third Scientific Session CPC, 9:00 to 10:00 Color Television, 10:30 to 11:40	Columbia Auditorium
11:50 a. m.	President's Luncheon for Distinguished Guests	Ballroom, Brown Hotel
2:00 p. m.	Specialty Group Sessions (13 specialty group scientific programs will be held simultaneously. Any KSMA member may attend any of these meetings.)	
5:00 p. m.	Council Dinner	Louis XVI Room, Brown Hotel
5:30 p. m.	Registration, House of Delegates	Roof Garden, Brown Hotel
6:00 p. m.	Subscription Dinner, House of Delegates	Roof Garden, Brown Hotel
7:00 p. m.	Second Meeting, House of Delegates	Roof Garden, Brown Hotel

THURSDAY, SEPTEMBER 25

9:00 a. m.	Fourth Scientific Session Scientific Papers, 9:00 to 10:00 Color Television, 10:30 to 11:50	Columbia Auditorium
12:00 noon	Council Luncheon	Parlors A,B,C, Brown Hotel
2:00 p. m.	Fifth Scientific Session Panel Discussion, 2:00 to 3:00 Color Television, 3:30 to 5:00	Columbia Auditorium
5:00 p. m.	Adjournment	

A 30-minute intermission has been scheduled during each morning and afternoon Scientific Session for visiting the Scientific and Technical Exhibits.

SCIENTIFIC PROGRAM

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THE L. P. YANDELL MEMORIAL MEETING

COLUMBIA AUDITORIUM

* * *

THE KENTUCKY STATE MEDICAL ASSOCIATION

TUESDAY, SEPTEMBER 23

COLUMBIA AUDITORIUM

Registration 8:00

8:45 Opening of General Session

Call to Order by the President
Edward B. Mersch, M.D., Covington

Invocation
Rev. Olof Anderson, Jr., pastor, Harvey-Browne Memorial Presbyterian Church, St. Matthews

Welcoming Remarks
Marvin A. Lucas, M.D., Louisville, President, Jefferson County Medical Society

Announcements
Robert W. Robertson, M.D., Paducah, KSMA President-Elect

FIRST SCIENTIFIC SESSION

9:00 A. M.

Edward B. Mersch, M.D., Covington, KSMA president, presiding

PANEL DISCUSSION

9:00 **Panel—"The Pregnant Patient"**
Frank R. Lock, M.D., Winston-Salem, N. C., Moderator
Donald Hamilton, M.D., White Plains, N. Y.
George J. Hamwi, M.D., Columbus, Ohio
E. G. McGavran, M.D., M.P.H., Chapel Hill, N. C.

10:00 **Visit Exhibits**

SCIENTIFIC PAPERS

10:30 **"Allergy in General Practice**
Kenneth L. Craft, M.D., Indianapolis, Ind.

10:50 **"Public Health and Medical Practice"**
E. G. McGavran, M.D., M.P.H., Chapel Hill, N. C.

11:10 **"The Diagnosis of Infra-Pulmonary Effusion"**
Laurence L. Robbins, M.D., Boston, Mass.

11:30 **President's Address**
Edward B. Mersch, M.D., Covington
President of K.S.M.A.

12:00 **Lunch**

SECOND SCIENTIFIC SESSION

2:00 P. M.

John S. Harter, M.D., Louisville, Vice President (Central), presiding

SCIENTIFIC PAPERS

2:00 **"Endocrinology for the General Practitioner"**
George J. Hamwi, M.D., Columbus, Ohio

2:20 **"Spontaneous and Habitual Abortion"**
Frank R. Lock, M.D., Winston-Salem, N. C.

2:40 **"The Problem of Suicide in General Practice"**
Donald Hamilton, M.D., White Plains, N. Y.

3:00 **Visit Exhibits**

COLOR TELEVISION

3:30 **Introduction**
Beverly T. Towery, M.D., Louisville

3:35 **"External Diseases of the Eye"**
C. Dwight Townes, M.D., Louisville
Roderick Macdonald, Jr., M.D., Louisville

4:05 **"The Diagnosis of Coronary Occlusion"**
Leonard Leight, M.D., Louisville

4:30 **"The Management of Acute Respiratory Difficulty"**
Eugene H. Conner, M.D., Louisville
Thomas N. MacKrell, M.D., Louisville

WEDNESDAY, SEPTEMBER 24

COLUMBIA AUDITORIUM

THIRD SCIENTIFIC SESSION

9:00 A. M.

Richard G. Elliott, M.D., Lexington, Vice President (Eastern), presiding

9:00 **CPC**
George W. Pedigo, M.D., Louisville, Moderator
Jack L. Chumley, M.D., Louisville, Discussant

10:00 **Visit Exhibits**

COLOR TELEVISION

10:30 **Caesarian Section—Panel Discussion and Demonstration of Operation**
Douglas M. Haynes, M.D., Louisville

Panel
Silas H. Starr, M.D., Louisville
Robert C. Long, M.D., Louisville
William E. Pugh, M.D., Louisville

11:20 **"Special Problems of the Newborn in Unnatural Deliveries"**
Mary O. Cruise, M.D., Louisville

PRESIDENT'S LUNCHEON

BALLROOM—BROWN HOTEL

11:50 A. M.

Edward B. Mersch, M.D., Covington, President of KSMA, presiding

Invocation
Rev. Bernard Boone, New Hope, Ky.

Recognitions
Edward B. Mersch, M.D.

Awards Presentations
Woodford B. Troutman, M.D., Louisville, KSMA secretary and treasurer

"The Disease Called Despotism"
Clarence Manion, J.D., South Bend, Indiana

Explanation of Wednesday Afternoon Program

Thirteen specialty groups will present scientific programs simultaneously on Wednesday afternoon and there will be no general session. Programs will be held in the Columbia Auditorium, the First Christian Church, The Calvary Episcopal Church, and The First Unitarian Church.

The 13 group meetings will start at 2:00 p. m. A 30-minute intermission to visit the exhibits has been scheduled, starting at 3:00 p. m. At 3:30 p. m. the 13 groups will again go into session for the final portion of their programs. KSMA members are free to move from one group to another during these sessions.

Kentucky Society of Anesthesiologists

2:00 **"Carbon Dioxide Absorption"**
George W. Schafer, M.D., Louisville

2:30 **"Apnea Due to Neomycin"**
Samuel S. Clark, M.D., Louisville

3:00 **Visit Exhibits**

3:30 **"Total Support During Intra-cardiac Procedures"**
Kenneth Keown, M.D., Columbia, Mo.

Kentucky Chapter—American College of Chest Physicians

2:00 **"Lung Abcess—10-Year Follow-up of 70 Cases"**
Daniel N. Pickar, M.D., Louisville

2:30 **"Pleural Biopsy"**
Grover B. Sanders, M.D., Louisville

3:00 Visit Exhibits
3:30 "Results of Non-operative Treatment of Bronchogenic Carcinoma"
John Paul Stamer, M.D., Louisville
4:00 "Surgical Treatment Transposition Great Vessels"
Daniel Mahaffey, M.D., Louisville

Kentucky Eye, Ear, Nose and Throat Society

2:00 "Changing Concepts in Retinal Detachment"
P. Robb McDonald, M.D., Philadelphia, Pa.
2:30 "Septal Surgery"
Max Bornstein, M.D., Louisville
3:00 Visit Exhibits
3:30 "The Relation of Allergy to Ophthalmology and Otolaryngology"
Kenneth L. Craft, M.D., Indianapolis
4:00 "Iridencleisis"
Harry Pfingst, M.D., Louisville

Kentucky Chapter, American Academy of General Practice

2:00 "Diagnosis and Management of Diabetes Mellitus"
W. R. Kirtley, M.D., Indianapolis, Ind.
2:30 "Oral Hypoglycemic Agents"
Alexander Marble, M.D., Boston, Mass.
3:00 Visit Exhibits
3:30 "Cardiovascular Complications of Diabetes"
Oglesby Paul, M.D., Chicago, Ill.
4:00 Color Television

Kentucky Obstetrical and Gynecologic Society

2:00 "Operative Indications in Gynecology"
Frank Lock, M.D., Winston-Salem, N. C.
2:30 "Induction of Labor"
M. Harper Wright, M.D., Bowling Green
3:00 Visit Exhibits
3:30 Panel Discussion:
Robert C. Long, M.D., Louisville, moderator
Frank Lock, M.D., Winston-Salem, N. C.
Laman Gray, M.D., Louisville
M. Harper Wright, M.D., Bowling Green

Kentucky Orthopaedic Society

2:00 "A Case of Lead Poisoning from a Bullet in the Knee"
Samuel L. French, M.D., Paducah
2:30 "Plantar Denervation for Pes Cavus"
George Garceau, M.D., Indianapolis, Ind.
3:00 Visit Exhibits
3:30 "Arthrodesis of the Hip by the Use of the Schneider Nail"
Daniel G. Costigan, M.D., Louisville
Fred E. Coy, Jr., M.D., Louisville
James M. Riley, M.D., Louisville
4:00 "Treatment of Fracture Dislocations of the Shoulder"
K. D. Leatherman, M.D., Louisville

Kentucky Society of Pathologists

2:00 "The Malignant Carcinoid Syndrome"
Randolph Schrodt, M.D., Louisville
2:30 "The Significance of Inclusion Bodies"
Samuel R. McCreadie, M.D., Louisville
3:00 Visit Exhibits
3:30 "Blood Clotting Mechanisms"
Hubert Pirkle, M.D., Louisville
4:00 "Pneumocystis Pneumonitis and Its Relationship to Cytomegalic Inclusion Disease"
Israel Diamond, M.D., Louisville
4:30 "Non-Neoplastic Cytologic Abnormalities of the Female Genital Tract"
James E. Parker, M.D., Louisville

Kentucky Chapter, American Academy of Pediatrics

2:00 "Differential Diagnosis of the Eczematoid Dermatitis in Infancy and Childhood"
Jerome Glaser, M.D., Rochester, N. Y.
3:00 Visit Exhibits
3:30 "The Prophylaxis of Allergic Diseases in Infancy and Childhood"
Jerome Glaser, M.D., Rochester, N. Y.
4:00 Questions and Discussion

Kentucky Chapter, American College of Physicians

2:00 "Paroxysmal Auricular Tachycardia with Block"
W. P. Hall, M.D., Paducah
2:30 "Recent Concepts in the Diagnosis and Treatment of Thyroid Disorders"
George J. Hamwi, M.D., Columbus, Ohio
3:00 Visit Exhibits
3:30 "The Hormonal Treatment of Breast Cancer"
William A. Blodgett, M.D., Louisville
4:00 "The Anticalinergics in Gastrointestinal Therapy"
Foster D. Coleman, M.D., Louisville

Kentucky Psychiatric Association

2:00 "Community Mental Health in Eastern Kentucky"
Ray Hayes, M.D., Lexington
2:20 "A New Treatment Service for Alcoholics"
Karl Schmidt, M.D., Hopkinsville
2:40 "New Kentucky Mental Health Legislation"
Harold McPheeters, M.D., Louisville
3:00 Visit Exhibits
3:30 "The Changing Picture of Dementia Praecox"
Donald Hamilton, White Plains, N. Y.

Kentucky Public Heath Physicians

2:00 "Program Problems in Central Area Counties"
Mitchell B. Denham, M.D., Maysville
2:30 "Program Problems in Central Area Counties"
Paul J. Sides, M.D., Lancaster
3:00 Visit Exhibits
3:30 "The Community As A Patient"
E. G. McGavran, M.D., Chapel Hill, N. C.
4:00 Business Meeting

Kentucky Radiological Society

2:00 "The Importance of Recognizing Soft Tissue Abnormalities in Radiologic Diagnosis"
Laurence L. Robbins, M.D., Boston, Mass.
2:30 "Aneurysms of the Renal Artery"
J. T. Ling, M.D., Louisville
3:00 Visit Exhibits
3:30 "Radiation Therapy in Management of Carcinoma of Cervix"
Wesley G. Farnsley, M.D., Louisville
4:00 "X-ray Changes in Surgical Emergencies of the Newborn"
Lawrence A. Davis, M.D., Louisville

Kentucky Chapter, American College of Surgeons

2:00 "Diaphragmatic Herniae"
Winfred Merrill Schell, M.D., Owensboro
2:30 "Diverticulum of the Duodenum as a Cause of Common Duct Obstruction"
John Dickinson, M.D., Glasgow
3:00 Visit Exhibits
3:30 "Closed Chest Injuries"
Brigadier General James Forsee, Washington, D. C.
4:00 "The Care of the Patient with Multiple Injuries"
Richard F. Grise, M.D., Bowling Green

THURSDAY, SEPTEMBER 25

COLUMBIA AUDITORIUM

FOURTH SCIENTIFIC SESSION

9 A. M.

Walter R. Byrne, M.D., Russellville, Vice President (Western), presiding

SCIENTIFIC PAPERS

9:00 **"Symptomatic Treatment of Bronchial Asthma in Infancy and Childhood"**
Jerome Glaser, M.D., Rochester, N. Y.

9:20 **"Oral Manifestations of Systemic Diseases"**
Harold E. Boyer, D.D.S., Louisville

9:40 **"Open Heart Surgery"**
Dwight C. McGoon, M.D., Rochester, Minn.

10:00 **Visit Exhibits**

COLOR TELEVISION

10:30 **"Frontal Lobotomy"**
William K. Keller, M.D., Louisville
Everett G. Grantham, M.D., Louisville

10:45 **"The Management of Hand Injuries"**
Harold E. Kleinert, M.D., Louisville

11:10 **"The Problem of Stroke"**
Ephraim Roseman, M.D., Louisville
Richard C. Turrell, M.D., Louisville

11:30 **"Hyperthyroidism"—Student Conference**
Beverly T. Towery, M.D., Louisville
Rudolf J. Noer, M.D., Louisville
Patrick Cavanaugh, M.D., Louisville

12:00 **Lunch**

FIFTH SCIENTIFIC SESSION

2 P. M.

Robert W. Robertson, M.D., Paducah, newly installed president, presiding

PANEL DISCUSSION

2:00 **Panel—"Geriatrics and Surgery"**
Arnold Griswold, M.D., Louisville, moderator
Brigadier General James Forsee, Washington, D. C.
George A. Garceau, M.D., Indianapolis, Ind.
Kenneth K. Keown, M.D., Columbia, Mo.
Oglesby Paul, M.D., Chicago, Ill.

3:00 **Visit Exhibits**

COLOR TELEVISION

3:30 **"Myxedema with Massive Pericardial Effusion" (case)**
John N. Goldsborough, M.D., Louisville

3:45 **"Malignant Carcinoid Syndrome"**
Thomas D. Stevenson, M.D., Louisville
Elbert G. Christian, M.D., Louisville

4:00 **"Recent Advances in the Management of Severe Head Injuries"**
R. Glen Spurling, M.D., Louisville

4:20 **"The Early Detection of Cervical Cancer"**
Laman A. Gray, M.D., Louisville
William M. Christophersen, M.D., Louisville

4:40 **Office Biopsy**
Condict Moore, M.D., Louisville

5:00 **Adjournment**

Mark Your Calendar

SEPTEMBER 23, 24, 25

KSMA Annual Meeting

PROGRAM
THIRTY-SIXTH ANNUAL MEETING
WOMAN'S AUXILIARY
to the
KENTUCKY STATE MEDICAL ASSOCIATION
BROWN HOTEL
LOUISVILLE, KENTUCKY
September 22, 23, 24, 25, 1958

REGISTRATION:
North Bay of Lobby, Brown Hotel
Monday—12 noon to 5 P.M.
Tuesday—9 A.M. to 5 P.M.
Wednesday—9 A.M. to 11 A.M.

Chairman of Registration: Mrs. R. W. Robertson, Paducah

Chairman of Hospitality: .....District Councilors

Out of State Guests: Mrs. Robert Monroe, Louisville

Hospitality Room open Tuesday—10 A.M. to 5 P.M.
Wednesday—9 A.M. to 1 P.M.

TUESDAY, SEPTEMBER 23
9:00 A.M.
PARLORS A B C

Pre-convention Board Breakfast (subscription). The Board consists of all general state officers, councilors, state committee chairmen, county auxiliary presidents and three immediate past presidents.

10:30 A.M.
SOUTH ROOM

Formal opening of the Thirty-Sixth Annual Meeting of the Woman's Auxiliary to the Kentucky State Medical Association.

Presiding .....Mrs. J. Andrew Bowen
Louisville, President

Invocation .....Mrs. Hugh Mahaffey
Richmond, Councilor District XI

Pledge of Allegiance to the Flag ..Mrs. Clyde Sparks
Ashland, Past President

"I pledge allegiance to the flag of the United States of America and to the Republic for which it stands, one Nation, under God, indivisible, with Liberty and Justice for all."

Pledge of Loyalty .....Mrs. Clyde Sparks

"I pledge my loyalty and devotion to the Woman's Auxiliary to the American Medical Association. I will support its activities, protect its reputation and ever sustain its high ideals."

Address of Welcome .....Mrs. Morgan R. Colbert
Louisville, President
Jefferson County Auxiliary

Response .....Mrs. R. W. Robertson
Paducah, Chairman Revisions

In Memoriam .....Mrs. Charles B. Johnson
Russell, Second Vice President

Presentation of Convention Chairmen
Mrs. Marvin Lucas
Louisville, Convention Chairman

Presentation of Distinguished Guests

Roll Call .....Mrs. J. O. Mattax
Carrollton, Secretary

Minutes of the Thirty-Fifth Annual Meeting
Mrs. J. O. Mattax

Report of the 1958 National Convention
Mrs. W. Vinson Pierce
Ft. Thomas, Councilor
District VIII
Report of the Councilor of the Woman's Auxiliary to the Southern Medical Association
Mrs. W. Ray Moore
Louisville, Councilor
from Kentucky
REPORTS OF OFFICERS:
Treasurer .....Mrs. Carlisle Morse
Louisville
President-Elect and Organization
Chairman .....Mrs. Jesse T. Funk
Bowling Green
President .....Mrs. J. Andrew Bowen
Old Business
New Business
Report of Nominating Committee
Mrs. Charles B. Stacy
Pineville, Chairman
Election of Nominating Committee for 1958-59
Presentation of 1958-59 Budget
Mrs. A. B. Colley, Owensboro
Chairman of Finance
Report of Registration .....Mrs. R. W. Robertson
Reports of State Chairmen

12:30 P.M.
SOUTH ROOM—SUBSCRIPTION LUNCHEON
in honor of
Mrs. Walker L. Curtis .....College Park, Georgia
President, Woman's Auxiliary to the
Southern Medical Association
Mrs. E. Arthur Underwood ..Vancouver, Washington
President, Woman's Auxiliary to the
American Medical Association
Invocation .....Mrs. Paul Hall, Paintsville
Councilor District XIV
Address .....Mrs. Walker L. Curtis
Informal Round Table Discussions on County Projects during Luncheon

2:00 P.M.
SOUTH ROOM
Reports of County Auxiliary Presidents

3:30 P.M.
SOUTH ROOM
Tea Honoring Distinguished Guests
Fayette County Hostesses
All Physicians' Wives Invited

WEDNESDAY, SEPTEMBER 24

9:00 A.M.
SOUTH ROOM
Invocation .....Mrs. Guy Morford, Owensboro
Civil Defense Chairman
Roll Call .....Mrs. J. O. Mattax
Reading of Minutes .....Mrs. J. O. Mattax
Announcements .....Mrs. Marvin Lucas, Louisville
Address .....Edward B. Mersch, M.D., Covington
KSMA President
Address .....Mrs. E. Arthur Underwood, President
Woman's Auxiliary to the American
Medical Association
Election of Officers
Presentation of Distinguished Guests
Installation of Officers ..Mrs. E. Arthur Underwood
Inaugural Address .....Mrs. Jesse T. Funk
Announcement of Committee Chairmen
Mrs. Jesse T. Funk
Final Report of Registration ..Mrs. R. W. Robertson
Adjournment

1:00 P.M.
TERRACE ROOM, KENTUCKY HOTEL
SUBSCRIPTION LUNCHEON
AND STYLE SHOW
in honor of
Mrs. E. Arthur Underwood, Vancouver, Washington
President, Woman's Auxiliary to the American Medical Association
Mrs. Walker L. Curtis, College Park, Georgia
President, Woman's Auxiliary to the Southern Medical Association
Past Presidents of the Woman's Auxiliary to the Kentucky State Medical Association
Invocation .....Mrs. R. O. C. Green, Bowling Green
Councilor District VI
Presentation of Distinguished Guests
Presentation of Past Presidents
Presentation of Officers
Presentation of Health Citation Award
Mrs. William C. Cloyd, Richmond
Chairman Award Committee of
Woman's Auxiliary to KSMA
Style Show .....Terrace Room

THURSDAY, SEPTEMBER 25

9:00 A.M.
SOUTH ROOM, BROWN HOTEL
Post-Convention Board Breakfast and Meeting (Subscription)
Presiding .....Mrs. Jesse T. Funk

10:30 A.M.
Tour—McDowell House, Danville, Ky.
Luncheon at historic Beaumont Inn, Harrodsburg
Buses leave Brown Hotel, Broadway entrance,
10:30 A.M.
Tickets on sale at registration desk
Sponsored by Jefferson County Auxiliary—All doctors' wives invited

STATE CONVENTION COMMITTEE
General Chairman .....Mrs. Marvin A. Lucas
Louisville
Registration .....Mrs. R. W. Robertson
Paducah
Style Show Luncheon ....Mrs. George A. Sehlinger
Louisville
Decorations and Flowers ...Mrs. John D. Gordinier
Louisville
Finance .....Mrs. Fred Williams
Louisville

Publicity .....Mrs. Earl W. Roles
Louisville
Hostess for Tea .....Fayette County Auxiliary
Hospitality Room .....District Councilors
Hospitality for Out-Of-State Guests
Mrs. Robert F. Monroe
Louisville
Tellers .....Mrs. C. Howe Eller
Louisville

STATE OFFICERS
1957-58

President .....Mrs. J. Andrew Bowen, Louisville
President-Elect ..Mrs. Jesse T. Funk, Bowling Green
Vice-President .....Mrs. B. T. Harris, Lexington
Vice-President .....Mrs. Charles B. Johnson, Russell
Vice-President .. Mrs. Merle M. Mahr, Madisonville
Vice-President .....Mrs. F. H. Hodges, Pikeville
Recording Secretary ...Mrs. J. O. Mattax, Carrollton
Corresponding Secretary
Mrs. B. B. Sleadd, Middletown
Treasurer .....Mrs. Carlisle Morse, Louisville
Parliamentarian .....Mrs. Irving Gail, Lexington

ADVISORY COMMITTEE

Louis Foltz, M.D., Louisville, Chairman
Howard E. Dorton, M.D., Lexington
R. Ward Bushart, M.D., Fulton

IMMEDIATE PAST PRESIDENTS

Mrs. Karl D. Winter, Louisville
Mrs. R. Ward Bushart, Fulton
Mrs. Charles B. Stacy, Pineville

DISTRICT COUNCILORS

1st —Mrs. R. Ward Bushart, Fulton
2nd—Mrs. William W. Wainer, Providence
3rd—Mrs. C. C. Donovan, Central City
4th—Mrs. A. S. Holmes, Elizabethtown
5th—Mrs. Houston Shaw, Louisville
6th—Mrs. R. O. C. Green, Bowling Green
7th—Mrs. Donald Chatham, Shelbyville
8th—Mrs. W. Vinson Pierce, Ft. Thomas
9th—Mrs. W. H. Sewell, Maysville
10th—Mrs. T. J. Overstreet, Lexington
11th—Mrs. Hugh Mahaffey, Richmond
12th—Mrs. Arthur L. Cooper, Somerset
13th—Mrs. E. W. Garred, Catlettsburg
14th—Mrs. Paul Hall, Paintsville
15th—Mrs. Daniel Bower, Williamsburg
Co-ordinator for Members-at-Large
Mrs. T. M. Perry, Jenkins

COMMITTEE CHAIRMEN

American Medical Education Foundation—
Mrs. Victor P. Dalo, Louisville
Benevolence—Mrs. P. E. Blackerby, Louisville
Bulletin—Mrs. Charles C. Kissinger, Henderson
Cancer—Mrs. Arnold Combs, Lexington
Civil Defense—Mrs. Guy Morford, Owensboro
Doctor's Shop—(Co-chairmen)
Mrs. Carroll Prince, Harrodsburg
Mrs. Reuben N. Lawson, Lawrenceburg
Finance—Mrs. A. B. Colley, Owensboro
Heart—Mrs. Edward S. Wilson, Pineville
Historian—Mrs. Keith Smith, Corbin
Legislation—Mrs. Maurice Kaufman, Lexington
McDowell House—Mrs. Walker Owens, Mt. Vernon
Mental Health—Mrs. C. Melvin Bernhard, Louisville
Nominations—Mrs. Charles B. Stacy, Pineville
Nurse Recruitment—Mrs. Frank T. Linton, Princeton
Program—Mrs. William H. Cartmell, Maysville
Public Relations—Mrs. William C. Cloyd, Richmond
Rehabilitation—Mrs. C. Howe Eller
Revisions—Mrs. R. W. Robertson, Paducah
Rural Health—Mrs. Clark Bailey, Harlan
Safety—Mrs. Robert Long, Louisville
Today's Health—Mrs. Harold Keen, Bowling Green
Tuberculosis—Mrs. Lyman Hall, Campbellsville
Blue Grass News Editor—
Mrs. Karl D. Winter, Louisville
Blue Grass News Co-Editor—
Mrs. U. Ray Ulferts, Louisville
Publicity—Mrs. Earl W. Roles, Louisville
Convention—Mrs. Marvin A. Lucas, Louisville

PAST PRESIDENTS OF THE WOMAN'S AUXILIARY TO THE KENTUCKY STATE MEDICAL ASSOCIATION

*1923—Mrs. Graham Lawrence, Shelbyville
*1924—Mrs. Graham Lawrence, Shelbyville
*1925—Mrs. VanAlbert Stilley, Benton
*1926—Mrs. VanAlbert Stilley, Benton
1927—Mrs. William M. Martin, Harlan
*1928—Mrs. James Thomas Reddick, Paducah
1929—Mrs. Philip E. Blackerby, Louisville
1930—Mrs. E. B. Houston, Murray
*1931—Mrs. George A. Hendon, Louisville
1932—Mrs. Arthur T. McCormack, Louisville
*1933—Mrs. Bartlett K. Menefee, Covington
*1934—Mrs. Joseph I. Greenwell, New Haven
1935—Mrs. Luther Bach, Florence
*1936—Mrs. Ernest Arthur Barnes, Albany
1937—Mrs. Stephen C. McCoy, Louisville
1938—Mrs. Harlan Usher, Sedalia
1939—Mrs. Reasor T. Layman, Elizabethtown
1940—Mrs. John M. Blades, Butler
*1941—Mrs. John G. South, Frankfort
1942—Mrs. John B. Floyd, Richmond
1943—Mrs. Octavus Dulaney, Louisville
*1944—Mrs. Eleanor Hume Offutt, Frankfort
1945—Mrs. Shelby Carr, Richmond
1946—Mrs. Elmer L. Henderson, Louisville
1947—Mrs. Walker Owens, Mt. Vernon
1948—Mrs. R. Haynes Barr, Owensboro
1949—Mrs. Elbert W. Jackson, Paducah
1950—Mrs. Clark Bailey, Harlan
1951—Mrs. John S. Harter, Louisville
1952—Mrs. David Woolfolk Barrow, Lexington
1953—Mrs. Clyde C. Sparks, Ashland
1954—Mrs. Karl D. Winter, Louisville
1955—Mrs. R. Ward Bushart, Fulton
1956—Mrs. Charles B. Stacy, Pineville
*Deceased

SPECIAL RULES OF ORDER

1. Officers and delegates are requested to sit in the assigned seats.
2. All persons appearing on the program must be seated on or near the platform when the session opens.
3. Delegates privileges are not transferable.

4. Badges must be worn by the voting body during all general sessions.
5. When addressing the chair, the speaker shall announce her name and that of her auxiliary.
6. Each speaker from the floor shall be limited to two minutes. No speaker may speak more than twice on the same question.
7. Officers giving reports shall be limited to five minutes.
8. No announcements, except those of a vital nature, shall be made from the platform.
9. All visitors are welcome at the general session.
10. All visitors and auxiliary members are requested to register.
11. The proceedings of this convention shall be governed by Roberts' Rules of Order, Revised.

U of L Med. Class Reunions Dinner To be Held September 25

Nine U of L Medical School classes will be holding reunions at the time of the 1958 KSMA Annual Session, according to an announcement from Leslie Shively, director of the University's alumni relations.

The annual alumni reunion dinner in the Crystal Ballroom, of the Brown Hotel on Thursday, September 25, will have as a featured speaker William J. McGlothlin, Ph.D., who will become a vice president of the U of L in September with principle duties dealing with the Medical Center. He is a former deputy director for the Southern Regional Education Board.

A cocktail party, sponsored by the faculty of the Medical School, will precede the dinner. All KSMA members are welcome to attend the cocktail party, according to J. Murray Kinsman, M.D., dean of the School.

This year marks the 50th reunion for the Class of 1908 and the 25th for the Class of 1933. Other classes holding reunions are: 1913, 1923, 1928, 1938, 1943, 1948, and 1953. There will be no reunion of the class of 1918.

Chairmen for the various classes are:

1908, alumni office
1913, not yet appointed
1923, James Winter, Louisville
1928, Pat Imes, Louisville
1933, Ben A. Reid, Louisville
1938, Thomas Giannini, Louisville
1943, Walter Coe, Louisville
Rudy Ellis, Louisville
1948, George and Laura Kimbrough, Louisville
1953, Jack K. Hellman, Louisville

Official Call

Annual Meeting

Kentucky State Medical Association

To the officers and members of the component county societies of the Kentucky State Medical Association.

Meeting Place

The Annual Meeting of the KSMA will convene at the Columbia Auditorium, Louisville, Tuesday, Wednesday, and Thursday, September 23, 24, and 25, 1958. The General Session will be called to order at 9 a.m. Tuesday.

The House of Delegates

The first regular session of the House of Delegates will convene at 7 p.m., Monday, September 22; the second regular session will begin at 7 p.m., Wednesday, September 24. Both sessions will be held in the Roof Garden of the Brown Hotel.

Registration

The registration department will be open on the Roof Garden of the Brown Hotel from 5:30 p.m. to 8 p.m. on Monday, September 22 and Wednesday, September 24. It will be open in the Columbia Auditorium from 8 a.m. to 5 p.m. on Tuesday, September 23; Wednesday, September 24; and Thursday, September 25.

WOMAN'S AUXILIARY

to the

KENTUCKY STATE MEDICAL ASSOCIATION

Tuesday, September 23, Brown Hotel

Pre-convention Board Breakfast, 9 AM, Parlors A, B, C, Brown Hotel; Formal opening of the thirty-sixth Annual Meeting, 10:30 AM, South Room.

Wednesday, September 24, Brown & Kentucky Hotels

Morning session, 9 AM, South Room, Brown Hotel, Afternoon session, beginning with a subscription luncheon; Style show at 1 PM in the Terrace Room, Kentucky Hotel.

Thursday, September 25, Brown Hotel

Post-convention Board Breakfast (subscription) and meeting, 9 AM, South Room.

Registration

The registration department of the Woman's Auxiliary will be open in the North Bay of the lobby of the Brown Hotel on Monday, September 22 from 12 noon to 5 PM; Tuesday, September 23, 9 AM to 5 PM and Wednesday, September 24, 9 AM to 11 AM.



The beautiful Audubon Country Club will be the site of the 1958 Kentucky State Medical Golf Association tournament. This is a portion of the course which is located on Robin Road off Preston Highway.

Audubon Country Club Chosen for 1958 Golf Tourney

Scene of the 1958 Kentucky State Medical Association Golf Tournament on September 22, 23, 24, and 25 will be the beautiful Audubon Country Club in Louisville, according to Martin Z. Kaplan, M.D., Louisville, chairman of the golf committee.

Located on Robin Road off Preston Highway, the Club offers excellent golfing facilities. Arrangements for the tourney are being made by Harold W. Baker, M.D., Louisville, who is a member of the Audubon Club.

Permanent trophies, plus one year's possession of traveling trophies, will be given to those winning top honors in the low gross, low net, and senior championship categories. In addition, daily prizes will be awarded to low gross and low net winners.

All golfers who have not already mailed their golf association membership dues of $5, should mail them to the KSMGA at the Association's Headquarters Office, 1169 Eastern Parkway, Louisville 17.

Members of the golf committee, besides Doctors Kaplan and Baker, are: Clifton G. Follis, M.D., Glasgow; Kenton D. Leatherman, M.D., Louisville; Robert E. Reichert, M.D., Covington; and William C. Wolfe, M.D., Louisville.

Scientific Program Again Features Color Television

The popularity and effectiveness of the televised medical and surgical procedures at the 1957 Annual Meeting, made the scheduling of another program of color television a "must" when the Committee on Scientific Assembly and Arrangements, headed by Edward B. Mersch, M.D., Covington, was making plans for this year's meeting.

A series of televised programs, featuring the faculty of the University of Louisville School of Medicine, has been planned. Totalling five hours and 40 minutes, the programs showing on-the-spot procedures—will be relayed from General Hospital to the Columbia Auditorium through the television facilities of Smith, Kline and French Laboratories.

Beverly Towery, M.D., Louisville, chairman of the Committee on Television, and members of his committee have already held numerous meetings and will hold many "rehearsals" with participants before the programs are presented at the meeting.

The first TV presentation will be at 3:30 to

5 p.m. on the opening day of the meeting—Tuesday, September 23. Then on Wednesday, there will be an hour and 10 minute showing from 10:30 to 11:40 a.m., preceding the President's Luncheon. Both sessions on Thursday will have color TV. During the morning session it will be scheduled from 10:30 to 12 noon and it will be the final feature presentation of the meeting from 3:30 to 5 p.m.

Ky. Chapt. ICS to Meet in Louisville During KSMA Annual Session

The Kentucky Chapter of the U. S. and Canadian Section of the International College of Surgeons will hold its annual meeting at the Brown Hotel in Louisville on September 26, following the close of the KSMA annual meeting according to J. Andrew Bowen, M.D., Louisville, the College's state regent.

A highlight of the meeting will be the appearance of Ross T. McIntire, executive secretary of the College who will be the guest of the group and will discuss the affairs of the College. Another speaker will be Frank P. Strickler, M.D., Louisville, who will speak on the "History of Surgery."

Another feature of the meeting will be the exhibition of a painting of Ephraim McDowell, M.D., which the Chapter will present to the Section for placement in the Hall of Fame in Chicago.

New Award in Dr. Barr's Memory To be Awarded Layman

This year for the first time the KSMA will present the R. Haynes Barr, M.D., Award to a layman who has made outstanding contributions to the people of Kentucky in the field of public health.

The new award was voted by the House of Delegates at the 1957 session at the recommendation of Richard R. Slucher, M.D., Buechel, who was then the KSMA president. It is named in honor of the late R. Haynes Barr, M.D., who died in 1953 while in office as KSMA president. Doctor Barr was often referred to as "the Father of the Association's public service efforts."

Sole authority to choose the recipient of the award, which will be given annually, has been delegated to the Awards Committee headed by R. Ward Bushart, M.D., Fulton. As has been the procedure in the past few years, the Committee will also nominate KSMA members it feels are worthy to receive the Distinguished Service Award and the Outstanding General Practitioner Award.

This year's winners of these two awards will be selected from the Committee's nominations by the House of Delegates at its Monday (September 22) night meeting. All three awards will be presented at the President's Luncheon in the Ballroom of the Brown Hotel at noon on Wednesday, September 24.

In 1957 Owen Pigman, Whitesburg, was selected as the outstanding GP and Oscar O. Miller, M.D., Louisville, received the Distinguished Service Award.

Serving with Doctor Bushart on the Awards Committee are: Hugh P. Adkins, M.D., Louisville; William H. Bizot, M.D., Louisville; Glenn U. Dorroh, M.D., Lexington; and Barton L. Ramsey, M.D., Somerset.

Woman's Auxiliary Plans Trip During Annual Meeting

A trip to the Beaumont Inn at Harrodsburg for lunch and to Danville for a tour of the McDowell House on Thursday, September 25, is being sponsored by the Woman's Auxiliary of the Jefferson County Medical Society.

All physicians' wives are invited to make the trip by air-conditioned Greyhound Bus which will leave Louisville at 10:30 a.m. (CDT) from the Broadway Entrance of the Brown Hotel. Private cars will be available for Board members who can not make the 10:30 bus, or for those who can not be seated if the bus is filled. Plans call for a return trip to Louisville at 5:30 p.m.

Cost of the trip will be approximately $6, which includes lunch, tour, and bus fare. Reservations can be made at the registration desk in the lobby of the Brown Hotel from September 22 through noon September 24.

If you are interested in this trip, you are requested to fill out the form printed below. Mail this to: Mrs. Everett H. Baker, 1207 Summit Avenue, Louisville. SEND NO MONEY.

I am interested in the trip to the Beaumont Inn and McDowell House on Thursday, September 25.

NAME .....

ADDRESS .....

This is not a reservation. Reservations must be made at the Registration Desk in the lobby of the Brown Hotel.

Latest Products to be Displayed by Technical Exhibitors

An opportunity to keep pace with expanding research in allied fields will be offered by the technical exhibitors at the 1958 Annual Meeting, who will be displaying the latest therapeutic products, medical literature, equipment, and services available to medical practitioners.

The Chairman of the Committee on Technical Exhibits, Jesse Funk, M.D., Bowling Green, has announced that 65 technical exhibitors will be on hand this year to answer any questions you may have, as well as to give you the latest information on their various products and services.

Long an important feature of the meeting from the point of view of the valuable information they offer in a graphic form, the technical exhibits will be open from 8:00 a.m. to 5:30 p.m. daily, except on the final day of the meeting when they will close at 3:30 p.m.

"Intermissions have been scheduled during both the morning and afternoon scientific sessions, in addition to opportunities before, between and after the meetings to allow members ample time to take advantage of this chance to increase their medical know-how," Doctor Funk said.

Two Phone Numbers Listed for Calls to M.D.'s at Annual Meeting

In case of an emergency, do you want to be contacted while attending the KSMA Annual Meeting in September?

If so make a note of the numbers listed below.

During the scientific sessions at the Columbia Auditorium on September 23, 24, and 25 from 8 a.m. to 5 p.m. daily the number to call is

JUniper 7-6903

In order to be reached during the House of Delegates Meetings on the Roof Garden of the Brown Hotel on both Monday night, September 22, and Wednesday night, September 24, after 6 p.m. the number to call is

JUniper 4-1311 Station 92

The Headquarters Staff will cover these phones during the above hours and see that your number is listed on the call board.

A Pledge for Kentucky Physicians

I do solemnly swear that I will make every effort to attend the 1958 KSMA Annual Meeting in Louisville on September 23, 24, and 25—and with this pledge, I promise to take immediate action by:

1. *Circling September 23, 24, and 25 on my calendar*
2. *Making arrangements for another physician to handle my practice*
3. *Writing for hotel reservations, if needed*
4. *Notifying patients that I will be out of the office for purpose of adding to my medical "know-how"*

Recognizing that the objective of the Association's Annual Meeting is to contribute to my medical knowledge by providing a varied, interesting and valuable program of postgraduate medical education, I hereby pledge myself to take an active interest in all scientific sessions, exhibits, and in all phases of the program leading to the advancement of the KSMA and the profession of medicine.

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Charles Caldwell, A Belated Tribute

ARMAND E. COHEN, M.D.*

Louisville, Ky.

NO MAN did more to influence medical education in Kentucky and the southwest than Charles Caldwell. Few physicians have been subjected to greater abuse and disappointment. Even now, more than a century since his death, his accomplishments are inadequately recognized and his iniquities and eccentricities not entirely forgiven. His career was characterized by alternate triumph and tragedy.

His greatest accomplishment and subsequent disappointment came in 1837 when at the age of sixty-five he was invited to Louisville to establish a new school of medicine. Following the toils of organization and twelve years of phenomenal success he suffered the pathetic humiliation of discharge and unwilling separation from the school.

Gross[1] describes his dismissal as impolitic and unjust since, "Caldwell was the father of the school. He had worked hard in founding it and had been a tower of strength in defending it in its early struggles. In a few years he would have retired of his own accord, in harmony with his colleagues and with the Board of Trustees, and in warm sympathy with the institution." Although no mention is found elsewhere, Gross states that following his discharge from Louisville, Caldwell was instrumental in founding the University of Nashville, which later was to become the medical department of Vanderbilt University. Gross concludes, "It is a bad plan to dismiss a professor without just cause, it being better to 'bear the ills we have than fly to others that we know not of."

Caldwell's medical career centered almost entirely about Philadelphia, Lexington, and Louisville, but it remained for one of his fellow alumni, considerably removed from those areas, to write a comprehensive biography.[2] It is a tribute to Dr. Caldwell's memory that this record was published by Dr. William Shainline Middleton, then Dean and Professor of Medicine at the University of Wisconsin, later secretary of the American Board of Internal Medicine, and now director of the medical program of the United States Veterans Administration.

In addition to the above and the usual historic references, it was my good fortune, through the courtesy of the Jefferson County and University of Louisville medical library, to have access to the exhaustive research of the lives of Kentucky medical pioneers, compiled in 1937-1940 by the Works Projects Administration.

This article is being written at a time when even the memory is fading of the bitter rivalries which once existed among the many largely proprietary medical schools of Kentucky. A new medical school is promised at Lexington, and the medical school at Louisville is reaching new heights in national recognition. Cooperation rather than competition is now pledged by the officials of the two centers.[3]

It is my hope that a greater appreciation of the role played by Charles Caldwell in early American and particularly in Kentucky medical history may be acquired and that his name again may be restored to the important pinnacle where it belongs.

To attempt an understanding of Charles Caldwell, it is necessary to know something

*Associate Professor of Medicine and Director of Allergy Clinic, School of Medicine, University of Louisville.

of the background and of the formative periods of his early life.

Early Life

He was born in Caswell County, North Carolina, May 14, 1772, the third child to survive of a large family. His parents had emigrated from the province of Ulster, in the north of Ireland. His father's forebears were said to have escaped from France with a price on their heads. One of his mother's ancestors during the siege of Londonderry in 1688 challenged and killed his opponent in the French army in a personal duel fought on the field between the opposing armies during an arranged cessation from battle.

Despite these famous and warlike ancestors, the immediate family of young Caldwell owned but a few slaves and eked out a precarious living from their farm. In his autobiography[4] Caldwell described the area of his birth as rude and letterless and so lamentably destitute of opportunity for education that no formal schooling was available for him until after his ninth year. Then, barefooted except in winter, and carrying his lunch of Indian corn bread and some milk, he would trudge more than three miles through a deep and tangled forest to attend a log school no less crude than the instruction imparted there. Despite these handicaps he showed a prodigious capacity, learning in the first year to read and write, and mastering elementary arithmetic. Before the end of the second year he had absorbed all the knowledge his teacher could offer. He then attended another school where, befriended by his instructor, Dominie Harris, he studied Latin, Greek and English composition. At the age of fourteen he had received the maximum amount of instruction then available at any North Carolina school. His parents having died, and having neither the funds nor the opportunity for further education, at this tender age he accepted a teaching position in charge of a grammar school near Bushy Mountains, North Carolina. He successfully taught his classes, in which some of the pupils were from five to ten years his senior, thus early showing his ability as an organizer and as a teacher.

It was not his desire to continue in pedagogy, and in his eighteenth year he considered preparing himself for a profession. His father had wanted him to become a minister in the Presbyterian church, but young Charles realized that his unorthodox views of religion were considered uncanonical and not compatible with the pursuit of this lofty calling. Personally he would have preferred to study law, but he was dissuaded from doing so by friends who thought he could better afford to study medicine. Accordingly, to prepare for this latter course, he spent eighteen months in Salisbury, North Carolina, under the preceptorship of a Dr. Harris, brother of his former tutor. Caldwell was disappointed with the meager library and inadequate training provided by his instructor. The high point of his stay there was the several days spent as personal escort to President George Washington, who was then making a tour of the southern part of the Union. The president publicly thanked him for his services, thus gaining Caldwell's undying gratitude and devotion. A few years later when Washington had occasion to call for fifteen thousand troops to put down the "Whiskey Rebellion" in western Pennsylvania, Caldwell dropped his studies as a medical student and volunteered his services.

Caldwell in Philadelphia

Caldwell was twenty years old when he arrived in Philadelphia in the autumn of 1792 to enter the medical school of the University of Pennsylvania. The faculty consisted of Drs. Shippen, Wistar, Kuhn, Hutchinson, Griffith, and Rush. He was impressed particularly by the great Benjamin Rush, and the admiration apparently became mutual, for soon Caldwell became a favorite pupil and frequently enjoyed the hospitality of the professor's home. Caldwell worked hard, avoided all social life, took systematic exercise, principally fencing, and wrote a number of articles for the newspapers, many of which were laudatory of Dr. Rush.

The fall of 1793 was a tragic one in which Philadelphia experienced a terrible epidemic of Yellow Fever. Caldwell volunteered his services, worked in an improvised hospital and suffered the maximum exposure to the disease. Sometimes he found himself deluged with "Black Vomitus" or dropping with exhaustion by the bedside of a patient, awakening to find himself with a corpse. He noted that intimate contact, including autopsies, did not show the disease to be contagious. He later noted the prevalence of the disease in damp, mosquito infested areas[5] and the more frequent liability of contacting the disease at night when the mosquito came out for her sanguine repast.

While at first Dr. Rush did not accept his pupil's ideas regarding the noncontagiousness of yellow fever, later he did. In 1797, together with Dr. Physick, he was helpful to Dr. Caldwell in the improvement of the water supply and sanitation systems in Philadelphia. Caldwell was much impressed by his experience during the yellow fever epidemic, which lead to his vigorous exposé of the existent quarantine and sanitation systems. The relationship with Dr. Rush was not always on an amiable basis. During the "Whiskey Rebellion" of 1793 Caldwell served as regimental surgeon. Later he had been much feted by the most prominent people in Philadelphia, then the capitol of the United States. Because he perhaps was a little too cocky over this experience, and on account of Rush's having used without acknowledgment some information on Hydrotherapy given him by Caldwell, the two became unfriendly. This led to an unseemly conflict when Caldwell presented his graduation thesis, and Rush did not sign his diploma until some time later and after an apology. Despite the professor's unfriendliness, Caldwell wrote anonymously and otherwise defended the reputation of his teacher who was being attacked because of his ideas of yellow fever and particularly because of his advocacy of copious blood letting and of repeated doses of ten to fifteen grains each of calomel and jalap. During one of their friendly intervals Caldwell was treated for yellow fever by Drs. Rush and Physick. Despite the gingivitis resulting from the mercurialization persisting until all his teeth were lost, he defended his master's treatment since it induced an "artificial cholera morbus" thereby "converting centripetal into centrifugal action"

In 1802 Caldwell was among the progressive group of American physicians to advocate the use of small pox vaccination. In 1803 he reintroduced clinical bedside teaching at the Blockley Almshouse, a practice which had been discontinued some time after its original introduction by Thomas Bond in 1766. In 1805 Caldwell translated a treatise on fevers and dedicated the work to Dr. Rush. Shortly thereafter he applied for a professorship in medicine at the University of Pennsylvania, but there was sufficient opposition in the faculty that he was not recommended by the Board of Trustees.

Bitter with disappointment Caldwell turned against the members of the faculty and particularly Dr. Rush, whom he accused of being a false friend. Thereafter he considered offers of professorships in Baltimore and in New York and unsuccessfully attempted to organize another medical school in Philadelphia. He next gave a series of public lectures, the first of which was used to ridicule Dr. Rush's cherished theories such as the Brumonian hypotheses of life. In 1809 he rented rooms near the university and stationed a servant near the entrance to distribute hand bills to attract students to his lectures. In 1810 he instituted a course of lectures in Medical Jurisprudence, one of the first to be delivered in America.

Dr. Rush died in April, 1813, and "Instinctively forgetting everything except the courtesies and kindnesses shown him by his old Preceptor" Caldwell, as editor, published a most laudatory obituary in Delaplaine's "Repository of the Lives and Portraits of Distinguished American Characters."

The professorship in Medicine was assumed by Dr. Barton, and following his death two years later, Dr. Nathaniel Chapman received the appointment. Chapman's protestation that Caldwell was better qualified for the position was probably true and at least diplomatic. It won for him the friendship of Caldwell, who not only prepared all of the earlier lectures in Medicine but also prepared an American edition of Cullen's "First Lines of the Practice of Physic," which text was used by Chapman, as his text for some ten to twelve years.

Caldwell had become a man of considerable influence in Philadelphia. His magnificent physique, scientific ability, and oratorical proclivity caused him to be much sought after as a public speaker and caused him to attract a large number of private pupils. He was one of the first full-time teachers who did no private practice except in a limited consultative capacity. When he had been refused a position on the university faculty these prophetic words were spoken to Dr. Rush: "Though you have pronounced the Philadelphia Faculty barred against my entrance, either it or some other will yet be opened to me, and I shall be invited and solicited to enter it. For, notwithstanding the hostility toward me to which you have alluded, should my life and health be spared, I will before the lapse of many years, be the occupant of a chair in a school of medicine as honorable as your own." In 1815, apparently in order to maintain his friendship and the flow of pupils attracted by him particularly from the west and

south, a special department of Physical Science was created by the university, and he was named Professor of Geology and Philosophy.

Despite these apparent successes, he was not happy in Philadelphia. His marriage had ended in divorce, and he resolved to leave that city as soon as his only child, a son, was graduated from Harvard.

Before leaving for Lexington, Kentucky, to accept the presidency of Transylvania University, Rev. Rorace Holley had confided his ambition to re-establish a medical department in that school and had repeatedly urged that Dr. Caldwell "be invitcd to takc charge of that branch of the university." The matter came to a head in 1819 when Dr. Samuel Brown, a Lexingtonian visiting in Philadelphia, requested a letter from Dr. Caldwell outlining his "sentimcnts in full on the practicability and advantages of erecting a medical department at Transylvania." In August, 1819, Caldwell received his official notice of appointment to a professorship in the department of medicine at that institution.

Caldwell in Lexington

Dr. Caldwell arrived in Lexington in November, 1819. Previous, but unsuccessful, attempts to establish a medical dcpartment at Transylvania had been made in 1809 and 1815. A third attempt in 1817 attracted a class of twenty pupils and received instructions from a faculty of which Dr. Daniel Drake was a member. This then was the fourth attempt to establish a medical department, and one that looked far from promising, when without a lecture room, a useful library or physical equipment, thirty-seven students awaited the new professor and Dean of the Institutes of Medicine.

Caldwell states, "I had under my direction one of the most miserable faculties of medicine, or rather the materials of which to form such faculty, that the Caucasian portion of the human family can well furnish, or the human mind easily imagine." Of the four fellow members of the faculty he describes one as letterless and untrained, the second with nerves that trembled and shrank from the slightest touch of responsibility, the third to some extent educated but who knew more of almost anything other than the subject he had been assigned to teach. The fourth, Dr. Benjamin Winslow Dudley, he found most despondent of belief that the school could be a success. This despondent colleague he describes as the only one who, despite the advantage of the best training then availablc in Amcrica and in Europe, still was deficient in scholarship and literary knowledge, and though by no means promising, yet possessed the industry, resolution, and pcrseverance that was to makc him one of the eminent surgeons of his time.

Despite this none too auspicious outlook, Caldwell attacked his problem with courage and vigor. On the occasion of his inauguration he was addressed in Latin by President Holley, and Caldwell replied in the same language. Then without notes, in most perfect English, for more than an hour, he held his audiencc spellbound as he extolled the possibilities of the future for this fourth medical school in the United Statcs and the first department of medicine cstablished west of the Allegheny Mountains. Sometime thereafter he madc a successful appeal to the legislature in Frankfort for a grant of five thousand dollars. This was supplemented by six thousand dollars from the citizens of Lexington. The following summer of 1820 he visited the southwestern states, attracting many students to the new school. He also journeyed to New Orleans and Philadelphia for the purpose of purchasing tcaching equipment.

The second year found the student population to have doubled and the school progressing satisfactorily except for complaints regarding the lack of books. This deficiency was supplied partially from the personal library of Dr. Caldwell and was to be remedied the following year when he was authorized, at his own expense, to visit Europe and to spend $17,000 for the procurement of books. Although in 1799 Transylvania's famous library had its beginning when Dr. Samuel Brown, Professor of Anatomy, and Surgery, at that institution was permitted to spend $500 for the purchase of books and other items for instruction in the medical department, one of the greatest additions was made by Caldwell.[6] He was able to make his purchases in Paris, near the close of the French Revolution at a most advantageous time, when the libraries of many literary and formerly wealthy persons were at forced sale. Caldwell was aware of these precious repositories and purchased at reduced prices many of the choicest works which at no other time might have been available. These purchases so magnificently augmented the library at Transylvania as to render it superior in those works to any other then existent in the United States and

were instrumental in bringing to Transylvania the enviable scholastic reputation that caused Lexington to be designated "The Athens of the West."

It was during this visit to Europe that Caldwell met Gall and Spurzheim and became an advocate of many of their thoughts on Phrenology. Thereafter he combined his teaching and interest in Physiology with neuro-anatomy and metaphysics. Dr. A. Earl Walker,[7] the present chief of Neurological Surgery at Johns Hopkins, says: "An appreciation of the metaphysical concept of mind prevailing at the opening of the nineteenth century is essential to an understanding of the developments in the past 150 years. It is paradoxical that the stimulus for the concept of cerebral localization should have been derived from a pseudoscience which came to be ridiculed by the scientific world. But Phrenology, as propounded by Gall and his pupil Spurzheim, did have in its unorthodox, exaggerated, and fanatical propositions certain elements of truth. For this reason, the general principles of Gall and Spurzheim deserve consideration."

Caldwell wrote voluminously to acquaint the profession with his views on Phrenology, and he was not without bitter critics. Nevertheless, his days spent at Transylvania were busy and for the most part happy ones. The year 1823 saw a class of two hundred matriculated. There was a steady increase in enrollment. Nearly three hundred were registered in 1828. Lexington was then one of the largest inland cities, with a population of some 8,000 inhabitants. The nearest and only rival medical schools were in Cincinnati, then a city of 9,000. Louisville and St. Louis were small river towns of about 4,000 population, and Indianapolis was not in existence. The Indians roved over most of the territory of the west. Thus on the very borders of civilization Caldwell was able to establish a school of medicine.

Beginning with his inaugural address, inspiring and welding together a reluctant faculty, he was never idle. He permitted himself but from four to six hours for sleep. In addition to his duties as Dean, transacting all the business of the faculty, he lectured eight to ten hours a week on the subjects Practice of Medicine and Materia Medica, maintained a voluminous correspondence with distinguished scientific and literary persons in America and in Europe, and wrote and published for both the lay and medical press as much as 400 printed pages per year. During his eighteen years of residency in Lexington, he was a leading citizen, much sought after as a public speaker, severe in his condemnation of gambling and frivolity, too bitter and critical perhaps of the writings of some of his fellow physicians, and unfortunate in his encounters with the local clergy over abstract matters of theology.

By 1837 the rivers had become a chief means of travel and trade, and while Lexington had shown little increase in population, the river towns, Cincinnati, St. Louis, and Louisville, had shown remarkable growth, the latter having attained a population of about 21,000. For some time the school at Transylvania had found increasing competition, and the faculty, fearing that the rapid growth of the neighboring cities would interfere with the popularity of their medical school, entertained the idea of transferring this department to Louisville.[8] Originally the faculty unanimously agreed to request the Board of Trustees to make this change, but later there was a division of opinion by a group of the faculty headed by Dr. Benjamin Dudley and a vigorous rejection of the idea by the authorities of the university and the local citizens.

Scathing articles appeared in The Lexington Intelligencer pointing out that but a scarce three years previous Caldwell had addressed the Lexington Medical Society and a pamphlet of some thirty pages had been published on the subject, "Thoughts On The Impolicy Of Multiplying Schools of Medicine." The whole scope of the address bore on the inexpediency of creating another school in Kentucky, since the needs of physicians in the west were adequately supplied by the schools in Cincinnati and Lexington. The Lexington Intelligencer, April 11, 1837, denounced Caldwell for his unusual performance in using the occasion of his Valedictory address to the faculty and graduates, March 15, 1837, for a scathing attack on those who had broken faith with him, and opposed the plan to transplant the medical faculty from Transylvania. The Intelligencer felt that "the occasion was one that called for a parting expression of kind feeling and benediction and one that no honorable man would take advantage of for the purpose of personal revenge."

While already resolved to resign his post at Transylvania, Caldwell's parting address no doubt considerably hastened it, since he was

notified to appear before the Board of Trustees to answer charges brought against him by Dr. Dudley. Caldwell's request was granted that the session be postponed one week for him to transact important business in Louisville, where he had been invited to establish the University of Louisville Medical School. When he failed to appear at this later date he was tried in absentee, charged with being actively engaged in attempting to form a rival school while yet a sworn officer at Transylvania. After three days of deliberation the resolution was passed that Caldwell be removed and dismissed from the faculty. A few days later a letter from Caldwell was received stating that he would shortly return to stand trial and that he would prefer charges against Dr. Dudley.

Time was to prove the wisdom of the position taken by Caldwell, that the school might have a better chance for survival in Louisville. Although the school continued in Lexington until 1859 it was never again to rise to the degree of popularity enjoyed under the guidance of Caldwell. Dudley, who had been the leading spirit in maintaining the old school reversed his position and in 1850 headed the faculty in the establishment of The Kentucky School of Medicine in Louisville. In 1865 the Transylvania school was consolidated with Kentucky University, and in 1898, acting under an amended charter, the Board of Curators transferred the medical department to Louisville. The school was staffed by a faculty, all but a few of whom had been members of the Kentucky School of Medicine. This lineal descendant and legal successor of Transylvania showed the vigor and growth expected of a healthy transplant and soon became one of the outstanding medical schools in Louisville. This was the eighth school of medicine established in Louisville, not including one school of Osteopathy and two schools for Negroes. The entire medical student population was said to be approximately 1,500.[9] At last the wisdom of Caldwell's much criticized report, "On the Impolicy of Multiplying Schools of Medicine," was recognized. Following the advice of the Council on Education and Hospitals of the American Medical Association in 1907-8 the remaining five schools were merged to form the present University of Louisville Medical School.

Caldwell in Louisville

It is difficult to see how Caldwell, then sixty-five years old, could reject his assured position in Lexington as well as a flattering offer from one of the Cincinnati schools to accept the herculean task of creating a new medical school in Louisville. The facilities there were most limited, and previous efforts to establish a medical school had failed. Likewise there was no undue enthusiasm on the part of the local physicians who viewed with jaundiced eyes the bringing in of outside professors whom they rightly considered as professional rivals for their private practices.

Caldwell chose to face these discouraging facts and accepted the invitation issued by James Guthrie and Judge Rowan to join the new school. Still the resolute warrior, he had the Trustees arrange a mass meeting of the citizens of Louisville so that he might address them in favor of the new school. He held this audience spellbound for more than two hours, following which a resolution was passed unanimously petitioning the Mayor and the City Council to endow the Medical School with a suitable building and $25,000 for books and equipment. These resolutions were received and sanctioned by the Council with but one dissenting vote and following a custom still in vogue the grant was made after there was a lopping off of $5,000 of the desired amount.

Following consultation with the Board of Managers of the new school, Caldwell assumed the chairs of the Institute of Medicine, Medical Jurisprudence, and Clinical Medicine, and appointed to the faculty his fellow conspirators, John Esten Cooke, Lunsford P. Yandell, and Charles Wilkins Short, all of whom had been discharged from Transylvania. Dr. Henry Miller was reappointed in Obstetrics, and a Dr. Miller from Cincinnati was invited to teach Chemistry. Later Dr. Joshua Flint was brought from Boston and made Professor of Surgery, and Dr. Jedediah Cobb was enticed from Cincinnati to accept the Chair of Anatomy at the then lucrative guarantee of $3,000 a year. Dr. Flint was sent to Europe to buy books, charts, and models for the library and anatomy department. A printed catalogue of the library dated 1847 lists titles which attest the good judgment with which the books were selected.[10]

The first session of the Medical Institute in 1837 found 80 students in attendance. Dr. Daniel Drake joined the faculty in 1839 and was instrumental the following year in having Dr. Samuel D. Gross appointed as Professor of Surgery replacing Joshua Flint. There was a

steady increase in the student population, and in 1847 there was a matriculation of four hundred and six, the largest class to have been assembled in any medical school in the Mississippi Valley. At this time Caldwell was 75 years old. He had remarried three years previously. Being concerned about his financial security and the future welfare of his family, he confided these circumstances to a few leading members of the Board of Trustees and indicated his desire to retire in March, 1850, just prior to his 78th birthday. He was unaware that the Board even then was considering replacing him and was prevented from doing so largely by his friends on the faculty, Henry Miller and Samuel D. Gross. The press of business of the school and his voluminous writing had left Caldwell unaware of his growing unpopularity.

In 1849, unwilling to defer action longer, despite caution urged by friends of the University, the Board of Trustees passed a resolution asking for Caldwell's dismissal. This was delivered by a delegation commissioned to confer upon him an emeritus degree. This honor he spurned.He accused his successor, Lunsford P. Yandell, unjustly, as he later admitted, with duplicity and conspiracy. Sick with worry and completely frustrated, the old man would buttonhole members of the faculty and again and again ask why he had been discarded. The tactful reply that it was due to his age rather than satisfying him only added to his desperation and chagrin. Despite the malevolent opinion of many of his colleagues, his students always loved him and one of the most appreciated events to soften the bitterness of his separation from the school was a set of resolutions signed by every member of the 1848-49 class attesting to their affection, appreciation, and regret that he was vacating his position.

Caldwell lived four years after his retirement. These years were busy ones spent in writing his autobiography and in contributing to medical publications. In 1850 he received an invitation from the American Medical Association to present a report on Mesmerism to the next annual meeting in Charleston, South Carolina. The report was finished and in perfect order, but due to his ill health was not presented in person.

Perhaps no one could fully understand this unusual man, least of all himself. Born in lowly circumstances but with an illustrious background, he developed a terrific compulsion to work and to succeed. He was not always able to reach a predetermined goal. In an age of intrigue and petty politics, on occasions, he was unable to rise above his environment. He would exhibit bitterness of tongue and action, which usually sooner or later was followed by retraction and apology. In an attempt at self-analysis he classified himself as a "soul enamoured of conflict." He felt that there were some who considered him "repulsively stern and haughty," but he could not remove the block which would have made them aware of his desire for mutual appreciation and friendship. There existed another group whom he could never wish to please, whom he designated "the conservators of the world who resist violently all change in manners, morals, taste, intelligence, customs, pursuits, education, and even in personal costume and habit." Samuel D. Gross in a review of the life of Caldwell stated in 1876, "I may add that Caldwell was a gentleman of the old school; he had a splendid physique, keen penetrating black eyes, a large head, most courtly manners and great colloquial powers. He had seen much of good society at home and abroad, could converse fluently and intelligently upon almost any subject presented to him and was thoroughly a man of the world. I may also add that he was one of the vainest men; and then to complete the picture, I should say he had something to be vain of."

Dr. Caldwell died in Louisville July 9, 1853, at the age of 81 and in accordance with his expressed wishes was buried in Cave Hill Cemetery in that city.

In the closing chapters of his autobiography he expressed the hope that the future and history would not deal with him too unkindly and that it would be recognized that his life had been dedicated to the furtherance of science and to the love of mankind. In his words: "My hope is strong and my belief by no means feeble that the due reward will be conferred on my name, when my earthly existence shall be nothing but a name, and the effects of my labors."

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Unusual Salmonella Infections *

Albert Balows, Ph.D.

Lexington, Kentucky

THE incidence of Salmonella infections as indicated by an extensive survey[1] has materially increased in the past few years. Unfortunately, practicing physicians apparently have not fully appreciated the significance of salmonellosis, except for typhoid fever.[2] Possibly the lack of adequate laboratory facilities coupled with a wide range of clinical manifestations are largely responsible for the apparent failure to consider the Salmonella as the etiologic agent in many undiagnosed infections.

Protean Nature

An indication of the protean nature of the Salmonella is the fact that at present well over 400 species or serotypes are recognized and every one of them is pathogenic for man, animals, or both. The importance of Salmonella as a potent and ever present source of infection can be proved by very briefly mentioning a few of the outbreaks that have been reported in the last few years.

Gayler and associates,[3] traced an outbreak of 17 cases of S. miami to watermelons which were purchased at the same store and which were contaminated by a knife when they were cut open. Fifty-one infants were infected with two different Salmonella because the fluid in the water trap of the delivery room resuscitator was contaminated.[4] Several hundred persons suffered from gastroenteritis after they ate hors d'oeuvres of liver contaminated by one of the food handlers.[5] Contaminated brewer's yeast, a component of a tube feeding mixture, was responsible for five cases of salmonellosis in hospital patients requiring tube feeding for various conditions.[6] Dauer[7] reported widespread outbreaks of S. montevideo infections traced to a certain brand of powered egg yolk marketed for infant feeding. More than 500 cases of gastroenteritis throughout the United States caused by S. reading were reported in the first five months of 1957.[8] Four of them were detected in Lexington. As yet, the concentrated efforts of local, state and federal public health authorities have failed to reveal the source of infection. The literature is replete with many more reports, and yet the infection rate continues unabated.

It is my contention that one way in which salmonellosis may be brought under control is to bring such cases to the attention of physicians and surgeons engaged in active practice. Considerable progress will have been made once it is firmly established that a Salmonella infection may present itself in the guise of various clinical and pseudo-surgical syndromes and that it commands the attention of the microbiologist, the clinician, public health physician and the surgeon. It must be equally emphasized that it is dangerous to limit the search for Salmonella to the stool, blood or urine. The microbiological service of any well equipped and well staffed laboratory should be broad enough to detect, isolate and identify Salmonella from any materal submitted to the laboratory for cultures.

To emphasize these points I will present five cases of "unusual" Salmonella infections. All of them were taken from the records of St. Joseph Hospital, Lexington, Kentucky. They cover a ten month period. All cultures were isolated by inoculating the specimen submitted to the laboratory on a battery of media. Provisional identification was made by biochemical reactions. Definitive identification was accomplished by group specific typing sera. Confirmation of each culture was obtained from the Enteric Division of the Communicable Disease Center of the Public Health Service.

Case 1

A 76-year-old white woman was admitted to the hospital after vomiting about 500 cc. of blood and passing several tarry stools. Roentgenograms of the abdomen showed a pseudopolypoid deformity in the antral portion of the stomach. The patient's temperature was never above 101° F. The laboratory work showed a red blood cell count of 2.4 million per cubic millimeter, 6.3 grams of hemoglobin per hundred cc. of blood, and a white blood count of 17,400 per cubic millimeter. The urine showed a trace of albumin; otherwise, it was normal.

The patient was given five pints of whole blood, after which, the hemoglobin was raised to 13.5 grams per hundred cc. of blood. The patient was then taken to the operating room.

*Presented at the annual Fall Clinical Conference of the Lexington Clinic on October 25-26, 1957.

On the posterior wall of the stomach, a large ulcer crater penetrating into the body of the pancreas and transverse colon was found. The liver appeared normal. The gallbladder was thick walled, but no stones were felt. Approximately two-thirds of the stomach and adjacent lymph nodes were removed. The pathologist's report revealed that this was a chronic ulcer with granulation and necrotic tissue. At the margin of the ulcer there were infiltrating masses of small malignant cells. The diagnosis was a reticulum cell sarcoma. None of the lymph nodes was involved.

The postoperative condition of the patient was good, and adequate drainage was maintained. The sutures were removed on the fifth day after operation. At that time a small amount of exudate was noted at one end of the incision. Salmonella typhosa was isolated from a culture made of this exudate. Meanwhile, the patient had been discharged from the hospital. Upon receipt of the report of typhoid bacillus, the patient was readmitted with a severe diarrhea after a 10 day lapse. On the second admission to the hospital, the stool culture also gave a growth of S. typhosa. The patient's course was progressively worse, and she died on her 10th day in the hospital. An autopsy permit was not granted. Although a definite history of typhoid fever could not be obtained from the patient, the gallbladder quite likely was the source of infection and the surgical procedure may well have been the stimulus necessary to provoke a fulminating and fatal infection with the typhoid bacillus.

Case 2

Two months before his admission to the hospital, a 36-year-old white man, a restaurant operator, noticed a tender swelling at the level of the eighth rib on the right lateral side. This swelling showed signs of induration and pain and was quite warm. As it became progressively worse, he was admitted for diagnosis and treatment and to rule out a possible malignancy. An irrigation and drainage were carried out in the operating room. A thin watery fluid was obtained.

Some of the fluid and tissue were submitted for bacteriologic work, and some of the tissue for pathologic studies. The tissue was ground in a sterile mortar with sterile aluminum oxide as an abrasive and saline as a diluent. A growth of S. oranienburg was obtained from the culture. The pathologic report showed subacute and chronic inflammatory tissue. S. oranienburg has been reported with regular frequency over the past several years. It occurs naturally as a cause of epizootics in chickens and other fowl and has been quite frequently isolated from eggs and powdered egg products. This man's occupation as a restaurant operator supplied an attractive hypothesis as to the source of infection. We were, however, unable to substantiate it with any positive findings. The patient complained of no enteritis, and several stool cultures were repeatedly negative for any Salmonella.

Case 3

One year before admission, this 45-year-old white man had had an operation on his left radius for an osteomyelitis which had persistently drained. The patient said that a diagnosis of tuberculosis had been made and that he had been placed on antituberculous therapy. The drainage persisted despite this therapy and other supportive measures. A sequestrectomy was performed, and a small sequestrum was found in a communicating sinus.

Specimens from curettage were cultured for acid-fast bacilli and for other organisms as well. Gram stains made from the currettage specimens showed several gram negative bacilli. Acid-fast smears failed to show any acid-fast bacilli. Some cultures obtained were later identified as Salmonella schottmuelleri (paratyphi b). Acid-fast cultures were negative after six weeks' incubation. The same organism, S. schottmuelleri, was isolated on two more occasions from the drainage which failed to respond readily to antibiotic therapy. Finally, after extensive therapy with chloramphenicol, the drainage stopped and the lesion appeared to heal. The possible source of the osteomyelitis might well be traced to the patient's history, which revealed a severe typhoid or typhoid-like infection as a child. Quite likely the osteomyelitis was a manifestation of a latent infection. It is well-known that osteomyelitis may result from previous Salmonella infections which may remain dormant for many years in bone tissue. Stools were negative for any Salmonella.

Case 4

This patient was a 78-year-old white woman, who was known to have had diabetes for 15 years. Her diabetes was not rigidly controlled. Two weeks before admission to the hospital, her history indicated, she "ate some greens"

and then complained of chills and low grade fever with vague abdominal discomfort.

A complete work-up in the hospital failed to reveal any positive findings other than those of uncontrolled diabetes. A chest roentgenogram showed that the lung fields were clear, except for a small calcified plaque in the aortic knob. The patient had a low grade temperature of 101° F. which persisted and was of an undetermined origin. Two days before she was discharged from the hospital, a blood culture was taken and growth obtained was identified as S. cholerasuis. The patient was then readmitted for treatment.

Upon her second admission, the white blood cell count was elevated to 14,500 per cubic mm. A differential showed 86 segmented white blood cells and 14 lymphocytes. In five days the white blood cell count rose to 23,000 per cubic mm. At this time, the patient complained of extreme shortness of breath and a smothering sensation. There was no liver or spleen enlargement. A roentgenogram of the chest showed a large amount of atelectasis of the right lung with encapsulated fluid. The heart and mediastinum were shifted to the right. The left lung was clear. One hundred and fifty cc. of serosanguinous fluid was obtained from the right chest. Cultures of this fluid also showed a growth of S. cholerasuis. The patient's temperature fell below normal, her condition rapidly became worse, and she died on her twelfth day in the hospital.

The death was due to pneumonia with pleural effusion, secondary to gastroenteritis caused by S. cholerasuis. While S. cholerasuis is primarily a pathogen for animals, swine in particular, it very frequently causes infection in man. Persons most frequently make contact with it by consuming infected meat. The mortality rate from S. cholerasuis infections is the highest from all the Salmonella infections and has been reported as high as 20 to 28 per cent.[9] The organism is notorious for its ability to readily invade the blood stream and to spread to other parts of the body from the gastrointestinal tract. Its invasiveness is equal to, or greater than, that of the typhoid bacillus.

Case 5

A 63-year-old white man was admitted to the urology service complaining of oliguria of more than one year's duration. Finally, complete urinary retention accompanied by extreme pain forced the patient to seek medical attention. KUB films, including the penis, showed a large stone embedded in the urethra near the meatus. Stones were also observed in the neck of the bladder and in the left kidney, and a large calcification was seen over the symphysis. Rectal examination of the prostate showed that the prostate was twice the normal size and several stones were felt. An emergency meatotomy was performed. This yielded a large stone, and its removal immediately relieved the urinary retention. Further work-up of the patient revealed many stones in the gallbladder. A suprapubic cystostomy was performed. No stones were found in the urinary bladder. Some of the prostatic tissue was resected for pathologic diagnosis. This, in turn, revealed no malignant changes.

The patient was then prepared for prostatectomy. The entire prostate was found to be extremely necrotic, and stones of various size were embedded in the necrotic tissue. Portions of this necrotic prostatic tissue were sent to the laboratory for cultures. Also, some of the fluid obtained from the bladder washings was sent to the laboratory for cultures. Both the prostatic tissue and the bladder fluid gave a growth identified as Salmonella typhosa. Upon receipt of this information, urine and stool specimens were submitted to the laboratory for cultures, both of which, gave positive growths of S. typhosa.

At no time, during the patient's hospital stay nor in his previous history, was there any indication or information referrable to a diagnosis of typhoid fever. Likewise, the patient showed no clinical signs or symptoms of typhoid fever. Attempts to obtain further information finally elicited that as a young man he had had a severe case of typhoid fever. This man apparently had then become a carrier of the typhoid bacillus. This information was made available to the Public Health Department, which in turn immediately attempted to track down any possible cases attributable to this patient. Unfortunately, the history obtained was very meager, and the patient was extremely uncooperative. It was ascertained by verbal reports that one and possibly two cases of typhoid fever have been directly attributable to this patient. Unfortunately, the proof was inadequate to establish this point firmly. As far as we were able to determine, the occurrence of typhoid bacilli in prostatic tissue in the car-

rier state is indeed extremely rare. No cases were found in the literature available to us. Also, it is worthy of note that dual foci of infections, both the stool and urine, as a reservoir for the typhoid bacilli are, likewise rarely encountered. The patient was advised to undergo a cholecystectomy in the hope that it would alleviate at least part of his carrier state; however, he refused this surgical therapy and, likewise, refused any other attempts to improve his condition.

Discussion

These five are but a few of the many cases of salmonellosis from the records available to us. Yet I believe they well point out the ubiquity of the Salmonella. It is my opinion that a Salmonella must be considered among the possible etiologic agents in any type of bacterial infection whether it be a simple abscess, meningitis, endocarditis, pelvic inflammatory disease, pneumonia, urinary tract infection, etc. Reserving a diagnosis of Salmonella infection for those patients who show a characteristic gastroenteritis, typhoidal or septic syndrome will continually fall short of revealing the true extent and diversity of salmonellosis. Admittedly, the diagnosis of many Salmonella infections is difficult and perhaps complex from both the clinical and laboratory point. But any microbiology laboratory worth its salt must be able to identify a Salmonella infection when suitable specimens regardless of their source are submitted for bacteriologic cultures.

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The Use of Promethazine in Labor

HAROLD B. GRAVES, M.D.
Louisville, Ky.

FOR years, the goal in obstetrics has been the search for a drug or a combination of drugs which would produce a satisfactory state of analgesia and amnesia without maternal and fetal respiratory depression. The use of various narcotics, barbiturates, belladonna alkaloids and anesthetics has not been successful in achieving this goal.

Promethazine* was originally introduced in 1946 by Halpern and Ducrot[1] as a phenothiazine derivative exhibiting antihistaminic properties of a somewhat more prolonged effect than most compounds of the phenothiazine series. While its safety and effectiveness as an antihistaminic agent have long been accepted,[2-5] other properties of promethazine render it very useful in clinical medicine.

Promethazine provides pre- and post-anesthetic sedation for surgical [6-11] and obstetrical[12] procedures and is widely employed in the prevention and active control of nausea and vomiting[13-17] associated with operative procedures or pregnancy and that of reflex origin. It is of proven value in the active and prophylactic treatment of motion sickness[18-20] and in the potentiation of action of central nervous system depressants, allowing for reduced dosage or elimination of these agents.[6, 12]

It was hoped that promethazine in combination with meperidine and scopolamine would aid in achieving the desired level of sedation, analgesia and amnesia during labor.

Method

Alternating 88 private obstetrical patients without respect to parity, 42 were employed as controls and 46 received promethazine. 45 of the patients in the promethazine series received one 25 mg. intramuscular dose of promethazine soon after admission to the ward. One patient in this series received two 25 mg. doses: one dose while in false labor and the other dose during actual labor. Patients in both series received additional sedation in a quantity sufficient to keep them quiet and comfortable. Secobarbital was the drug of choice in early labor when pains did not seem severe enough to warrant the use of a more potent agent.

When the severity of pain did warrant, a combination of meperidine (50 mg) and scopolamine (1/300 grain) was administered intravenously. The duration of labor was estimated for patients admitted in labor as the time from admission to the time of delivery and, for patients undergoing induction, as the time from the onset of pains until delivery. For the latter purpose, Pitocin® was given to 22 patients in the control series and 18 in the promethazine series. This drug was used for the elective induction of labor along with artificial rupturing of the membrances.

Table I

Table I describes the type and amount of sedation administered. The 42 control cases received a total quantity of 64.5 grains of secobarbital or an average of 1.5 grains per patient. Patients receiving promethazine needed only 18.0 grains of secobarbital for an average of only 0.4 grain per patient. With regard to the combined dosage of meperidine and scopolamine, the 42 control cases received a total of 84 doses or an average of 2.0 doses per patient, whereas the 46 promethazine cases received 82 doses or an average of 1.8 doses per patient. In the control series receiving additional anesthetics, spinal anesthesia

TABLE I
Analgesic and Anesthetic Drugs Administered

		Control Series	Promethazine Series
Promethazine—Dose per patient		0	25 mg
Secobarbital—Total quantity administered		64.5 grains	18.0 grains
Average amount per patient		1.5 grains	0.4 grains
Meperidine-Scopolamine—Total doses given		84	82
Average dose per patient		2.0	1.8
Anesthetics—	Spinal	36	42
	Other	7	4

*Promethazine was supplied as Injection Phenergan® hydrochloride by Wyeth Laboratories, Inc.

TABLE II
Nature of Patients and Duration of Labor

	Control Series	Promethazine Series
Number of Patients	42	46
Primiparae	13	13
Multiparae	29	33
Labor—Total hours	281.5	257.0
Average hours per patient	6.7	5.6

was administered to 36 patients, whereas in the promethazine series it was given to 42 patients.

Table II

In Table II are listed the types of patient with regard to parity and the duration of labor. There were 13 primiparas (approximately 30%) in both groups. As for multiparas, there were 33 (72%) in the promethazine series and 29 (69%) in the control series. The total number of hours in labor for patients receiving promethazine was 257.0 or an average of 5.6 hours per patient. In the controls, the total hours in labor numbered 281.5 or an average of 6.7 hours. Although the difference in the number of hours in labor for the two groups is definite, its full significance is not apparent with the number of patients employed in this study.

There were two patients in the control series with nausea and vomiting and one in the promethazine group. There was no apparent effect on blood pressure in either series. With promethazine there was one case of an infant with depressed respiration who subsequently recovered without complications. This case did not appear to be attributable to the drugs received.

Discussion

Patients receiving promethazine were generally more quiet, arrived at full dilatation with less sedation and were more alert than control patients. The usual dose of barbiturates was reduced by the use of promethazine. Promethazine did not affect blood pressure, either in the presence or absence of spinal anesthesia. There appeared to be little or no necessity for the repetition of the drug.

The apparent need for high levels of meperidine and scopolamine to control severe pain in the advanced stages of labor was lessened somewhat although the reduction was not statistically significant. It would appear advisable in future studies to determine the effectiveness of larger doses of promethazine on the meperidine-scopolamine requirements.

From experience with promethazine, the recommended procedure is for the patient to receive promethazine early in labor, or in the case of elective induction of labor, at about the time at which induction is begun. The quantity of barbiturates usually used can be substantially reduced if not completely eliminated. The patient remains quiet, and is not apprehensive or uncomfortable until the pains become severe and the cervix is more than two fingers dilated. When the patient becomes decidedly uncomfortable, a combination of 50 mg of meperidine and 1/300 grain of scopolamine is administered intravenously. This amount of analgesia will carry most multiparas and a large number of primiparas to full dilation. This combination of meperidine and scopolamine may be repeated if required. In addition, spinal anesthesia may be employed without undue effects on blood pressure.

Summary and Conclusions

Promethazine, a phenothiazine derivative, was administered to 46 out of a group of 88 private obstetrical patients during labor. The remaining 42 patients served as controls for this study. Both groups received secobarbital as required during the early stages of labor, and then a combination of meperidine and scopolamine, followed by spinal anesthesia.

This combined therapy had little or no effect on blood pressure during labor and its administration did not contraindicate the use of spinal anesthesia. Nausea and vomiting were practically absent and there were no deleterious effects on the newborn infant.

In this study, promethazine encouraged the relaxation and improved the comfort of the obstetrical patient during labor. It increased the effectiveness of sedation and allowed a major reduction in the amount of barbiturates used.

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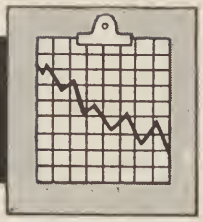
The working programme of a surgeon shows how much energy could be taken out of the human organism. The Mayo brothers were generally in their operating theatre by 7:30, and Harvey Cushing after breakfast at 8:00, was driven over to the hospital. While the chaffeur drove on to school with the Cushing children, their father was in his hospital office, attending to correspondence. He remained thus for about two hours occasionally eating buttered toast, and was ready to commence his operations by about eleven o'clock.

There followed lengthy, meticulous and laborious hours. Few people who picture the glamorous lives of great surgeons could face the strain of sitting in a darkened and moist room, working with deft touches of fingers at the bottom of a cavity a few inches across, patiently arresting the blood from tiny arteries, handling everything with prodigious delicacy, never hurrying, hardly ever relaxing, each faculty strained upon that narrow field which is the interior of a human skull brightly illuminated from an electric lamp fastened to the operator's forehead. For three or four hours this must go on, silently, with every moment deliberately keyed down so as to be quite undramatic; yet behind it is the human life at stake, and in consequence the emotions of the operator can never run cold. He must give of himself all the time, never allow his attention to wander, must keep a look-out for all possible danger signs, while the team of six or eight assistants who are in the theatre have to be directed by his responsible brain.

—*Williams*



CASE DISCUSSIONS
From The
University of Louisville Hospitals



Rupture Of The Gallbladder Secondary To Choledocholithiasis

Louisville General Hospital

John R. McGowan, M.D., Resident in Surgery

R. M., a 56-year-old unemployed male was admitted to the Medical Service on September 30, 1957 complaining of stomach pain and vomiting. He was confused and a history was difficult to obtain. About six weeks prior to admission he had noted dark urine and three weeks later had developed chills, fever, jaundice and clay colored stools. He was a known alcoholic who had been followed in the Medical Clinic with complaints of upper abdominal pain and nausea for the past two years. Previously repeated gallbladder series had revealed a non-functioning gallbladder. There was no history of jaundice prior to this illness. May, 1957, he received thorazine for nausea and upper abdominal pain.

Physical Examination

Physical examination revealed a markedly dehydrated and confused middle aged male. Temperature 97°; respirations 20; blood pressure 80/40; pulse 74. He was obviously in pain. His skin exhibited jaundice and spider nevi. There was no gynecomastia, and hair distribution was normal. The lungs were clear. The heart was not enlarged to percussion and the rhythm was regular except for occasional premature beats. No murmurs were heard. Examination of the abdomen revealed generalized tenderness with increased muscle resistance in all quadrants, most marked in the right upper quadrant. The liver was percussed 3 cm. below the right costal margin. The spleen was not palpable. A fluid wave could not be demonstrated. There was no evidence of dilated or distended veins on the abdominal wall and there were no previous surgical scars. Rectal examination revealed the presence of soft clay colored stools. Neurological examination revealed only disorientation.

*Hospital No. 16744

Laboratory Examination

Hemoglobin 12.2, white blood cells 8,400 with 86 polys, Prothrombin time 40% of normal, NPN 30 Mgm. per cent, CO_2 25.3 Mgm. per cent, C1. 103 mEq., Serum bilirubin total 13.9 Mgm. per cent, Serum albumen 2.1 Gm. per cent, Globulin 2.9 Gm. per cent, Alkaline phosphatase 6.8 units (normal two to eight), Cephalin flocculation 4 plus, Thymol turbidity 12.8 units.

Chest x-ray on admission revealed a small pleural effusion of the right base. Abdominal films were interpreted as a probable paralytis ileus.

Hospital Course and Treatment

Two days after admission the patient was transferred to the surgical ward. He was treated with nasogastric suction and hydrated with saline and 5% glucose in distilled water. Blood transfusions were given. Administration of Vitamin K produced an elevation of prothrombin time to 80% of normal. Urinary bladder drainage was instituted and procaine penicillin was administered.

On the day of transfer to the surgical service abdominal exploration was performed under intercostal block anesthesia. A perforated gallbladder was visualized and cholecystostomy, accompanied by insertion of penrose drains into the subhepatic space was accomplished. Postoperatively his general condition rapidly improved; the icterus had completely cleared twenty-one days after surgery. A cholecystostogram performed through the cholecystostomy tube revealed multiple common duct stones and some of the dye passed into the duodenum. On December 10, 1957, the patient underwent a cholecystectomy, choledochostomy and operative cholangiogram with T-tube drainage of the common duct. His postoperative course was uneventful and he was discharged on January 14, 1958.

Discussion

Harold E. Kleinert, M.D., Assistant Professor in Surgery: Bile peritonitis, following rupture of the gallbladder or common bile duct is associated with a high mortality rate. Acute cholecystitis progressing to necrosis and rupture of the gallbladder wall is not an uncommon cause of bile peritonitis. The physician who elects to treat acute cholecystitis conservatively must constantly observe the patient and immediately change therapy if there is evidence of progression of the disease as indicated by increasing abdominal tenderness and elevation of temperature and pulse. Rupture of the common duct secondary to choledocholithiasis is not uncommon. The case presented here is unusual in that rupture of the gallbladder was secondary to choledocholithiasis.

The complications of untreated chronic cholelithiasis are many; acute cholecystitis with rupture of the gallbladder and bile peritonitis, empyema of the gallbladder, obstruction of the common duct, the high incidence of carcinoma of the gallbladder associated with cholelithiasis and gall stone ileus are all frequently seen. Because of these, patients with cholelithiasis although asymptomatic, should be advised to have cholecystectomy.

The morbidity and mortality rate of cholecystectomy for chronic cholecystitis and cholelithiasis is significantly lower than that for acute cholecystitis. Similarly the mortality rate of cholecystectomy for chronc cholelithiasis is much lower than the mortality rate caused by the complications of untreated cholelithiasis.

Obviously the case presented here would have been prevented a near fatal outcome had he submitted to an elective cholecystectomy two years earlier when he was first found to have gallbladder disease as evidenced by repeated non-functioning cholecystograms.

The differential diagnosis of jaundice frequently taxes the most astute diagnostician. This patient, by history, was jaundiced three weeks prior to hospital admission. On entrance to the hospital he was in shock, and had generalized abdominal tenderness most marked in the right upper quadrant. Rupture of the common bile duct, secondary to choledocholithiasis appeared likely. Toxic rapidly advancing hepatocellular disease will produce a similar clinical picture. Previous administration of thorazine further complicated the diagnosis. Other diseases, more rare, such as liver abscess with rupture or hemorrhage into a large pancreatic tumor could enter the differential diagnosis.

Laboratory studies were not significant. Repeated cholecystograms prior to this illness were reported as non-functioning; therefore it could be assumed that he had gallbladder disease. Liver function studies were only moderately altered. The prothrombin time increased following administration of Vitamin K. Clay colored stools in the rectum indicated that bile was not entering the intestine. Clinical and laboratory findings were more suggestive of choledocholithiasis with subsequent rupture of the common bile duct, a disease amendable only to surgical therapy.

Treatment

The patient's extremely poor general condition after adequate supportive therapy, i.e., hydration, blood transfusions, Vitamin K and nasogastric suction, necessitated abdominal exploration under intercostal nerve block anesthesia. Under these circumstances the simplest and shortest procedure offering the patient relief must be accomplished. Examination of the abdomen through a right upper quadrant incision revealed bile peritonitis with rupture of the gallbladder. The irritating bile fluid must be aspirated and drainage of the gangrenous gallbladder instituted. Any stones found in the gallbladder must be removed. In this case no attempt was made to explore the common duct since it was evident the patient would not survive this more lengthy procedure. Later a cholecystogram can be performed through the external biliary fistula and often the common bile duct will also visual.

Definitive elective surgery, cholecystectomy and choledochostomy, is performed when the patient's general condition has improved sufficiently to withstand this major procedure.

Question: What are the indications for cholecystectomy and cholecystostomy?

Dr. Kleinert: Cholecystectomy is always the procedure of choice for acute or chronic cholecystitis. Cholecystostomy is rarely performed and is only indicated when the patient's physical condition necessitates an extremely short operative procedure. A patient with acute cholecystitis in congestive heart failure who does not respond to conservative therapy is such an example.

Question: After a cholecystogram, what does the report "non-visualization" of the gallbladder mean to you?

Dr. Kleinert: The gallbladder may not visualize for several reasons, even though not diseased. If the cholecystogram is done during the presence of other acute abdominal diseases or if the serum bilirubin is higher than 5 milligrams per cent the gallbladder ordinarily will not concentrate dye in sufficient quantity to be visualized. Non-visualization after standard dosage of dye in this hospital is followed by administration of a double dose. If the gallbladder still fails to visualize after the opaque tablets have been swallowed and absorbed from the intestinal tract one may expect the gallbladder to be diseased in 85-90% of cases.

Question: What is the accepted mortality rate in biliary tract surgery?

Dr. Kleinert: Cholecystectomy for chronic cholelithiasis in most clinics is less than ½ of 1 per cent. Cholecystectomy for acute cholelithiasis is usually associated with 2 to 4 per cent mortality rate. Common duct exploration increases the mortality rate particularly when associated with acute cholecystitis. The mortality rate in patients who have a bile peritonitis is over 25 per cent. From these figures alone it is obvious that patients with chronic cholecystitis and cholelithiasis should have definitive elective surgery at an optimum time rather than as an emergency procedure. This will spare them the very real hazards associated with the complications of cholelithiasis.

A Word For Consultants

From Goodlye Doctrine and Instruction by John Halle (1529-1566)

When thou arte callde at anye time,
A patient to see;
And doste perceave the cure too grate,
And ponderous for thee:

See that thou laye disdeyne aside,
And pride of thyne owne skyll:
And thinks no shame counsell to take,
But rather wyth good wyll.

Gette one or two of experte men,
To helpe thee in that nede;
And make them partakers wyth thee,
In that worke to procede.

. . . But one thing note, when tow or moe
Togzther joyned be;
Aboute the paynfull patient,
See that ye doe agree.

See that no discords doe arise,
Nor be at no debate;
For that shall sore discomforte hym,
That is in sycke estate.

For noughte can more discomforte him,
That lies in griefe and peyne,
Than heare that one of you dothe beare
To other such disdeine.

Wherzfore what so ye have to saye,
In thinges about your arte;
Let it be done among yourselves,
In szcrete and a parte.

With one consent uniformlye
Comforte the wounded man;
But unto good friends of hys
Express all that ye can . . . .

EDITORIALS

World Health

SIR Leslie Knox Munro, K.C.M.G., K.C.V.-O., President of the Twelfth General Assembly of the United Nations and New Zealand Ambassador to the United States addressed the World Congress of Gastroenterology in Washington, D.C., Tuesday, May 27, 1958 on the occasion of their annual dinner. So informative and inspiring were his remarks that we obtained his permission to reproduce in our Journal that portion of his address pertaining especially to the problems of World Health.

"The achievements of the World Health Organization since its inception, I venture to say, rank second to none in the furtherance of the common ideals and must be a source of just pride to your profession. In 1948, when the World Health Organization was established, most of the countries of the world were still suffering from the consequences of the Second World War. It is true that mankind was, on the whole, spared the terrible epidemics which were the unavoidable aftermath of the great wars of the past, and that, through international co-operation, of which UNRRA was an outstanding example, much was done to remove some of the economic and social disturbances which lie at the very source of physical and mental ill-health. Nevertheless, the health standards under which the overwhelming majority of men, women and children lived were appallingly low.

"Fortunately, the speed of progress has been much greater than expected. This has been due partly to the fact that the great advances made during the war in science and medicine, as well as the new knowledge we have continued to acquire since the end of the Second World War, could at last be put at the disposal of all peoples as a whole. I am thinking of the truly amazing weapons chemotherapy can now wield against such diseases as typhoid, leprosy, tuberculosis, and other age-old scourges; of DDT and other powerful insecticides; of the great benefits medicine derives from the study of hormones and of vitamins; of the modern science of nutrition; of the new approaches to emotional and mental disturbances; of the advances made in the care of mother and child in the protection of people at work, at recreation and at home; and of many other discoveries made in practically all fields of medicine and public health.

"Health, like peace, is one and indivisible. As we survey the fields where, over the years, man has made such great strides towards the attainment by all peoples of the highest possible level of health, we see at the present time the beginnings of the fruits of labours for world consciousness in the realm of health.

"I do not forget that the world commonwealth of medicine has existed since doctors first shared their knowledge. In particular, I pay tribute to the World Medical Association, which works so closely with the World Health Organization. International action for health has been known ever since pestilential diseases frightened nations into measures such as quarantine.

"In those limited areas of the world in which it has been possible to apply this knowledge intensively, much of the burden of, for instance, infectious disease has now been lifted. In such areas, the public has put behind it the terrors of the past—cholera, plague, smallpox and yellow fever.

"Parents in many countries no longer fear most of the communicable diseases commonly associated with childhood—measles, diphtheria, scarlet fever, whooping cough—because, if they occur at all in these favoured areas, they rarely kill.

"In very many countries malaria has been

Opinions expressed in contributions to The Journal are those of the writers and do not necessarily reflect the views of the Kentucky State Medical Association.

eradicated, tuberculosis is fast disappearing and very recently there has been a major advance against the scourge of poliomyelitis.

"The list of triumphs is a lengthy one, and the stage that has been reached thus far has not come about by luck but by hard work and effective organization. In the process, hundreds of research centres have been developed; millions of health workers have been trained; hospitals and health centres have been built both in cities and in remote areas; people have formed voluntary organizations to combat sickness through joint action; and governments throughout the world have created national and local health services that increasingly help all peoples to gain health.

"But the total needs are still very far from being met. Much more growth and extension are urgently needed in order that all may have the degree of protection that is available to an increasing but yet far too small a segment of mankind."

Sam A. Overstreet, M.D.

For You and Your Patients

QUALITY . . . . Variety . . . . and Opportunity will keynote the 1958 KSMA Annual Meeting in Louisville on September 23-25.

Providing large scale benefits both to YOU and the patients you serve, the meeting offers an opportunity to obtain the very latest information on medical advances through a varied and interesting program.

Top notch scientific presentations by national and local speakers, specialty group meetings, panel discussions, televised on-the-spot surgical procedures, and comprehensive scientific and technical exhibits have been carefully planned by the Committee on Scientific Assembly and Arrangements with YOU in mind.

This year 12 well-known speakers from throughout the nation have been invited to speak at the general session, either as featured speakers or members of panel discussions. During the Wednesday afternoon session they will participate in their respective specialty group meetings—the portion of the program which is of particular interest to physicians who limit their practices.

Promising to be one of the highlights of the meeting, color television—emanating from the General Hospital—will make it possible for physicians to watch actual surgical procedures performed by members of the University of Louisville Medical School faculty.

Reports from the Committee on Scientific Exhibits indicate that this year's scientific exhibits will be a "must" on the agenda of those attending the meeting. Carefully screened technical exhibits—65 in all—will show the latest products, services, and equipment available to you and your patients. Long an important educational feature of the annual meeting program, the exhibits are a valuable addition to the postgraduate medical education program.

Broadening, enlarging, and bringing your knowledge of medicine up-to-date are, of course, the primary reasons for the meeting. Not to be overlooked, however, is the chance the meeting offers to renew acquaintances and to make new contacts with colleagues throughout the state. Alumni of the University of Louisville will want to attend the class reunions held in conjunction with the meeting and golfers won't want to miss the KSMGA tournament.

Today's rapid medical progress increases the necessity for meetings—like the KSMA Annual Session—which give physicians a chance to keep pace with the times. The modern physician will take advantage of every opportunity for increased knowledge. The KSMA Annual Meeting offers such an opportunity on a statewide scale. It's up to you to take advantage of it. There's something in it for YOU . . . . and your patients!

ORGANIZATION SECTION

Doctor Hoffman Announces Dates for Diabetes Week

To date, 90 counties have indicated they will participate in the Diabetes Detection Drive on November 16-22—more than have ever participated in previous drives since the start of the program in 1952, according to Robert Hoffman, M.D., South Fort Mitchell, chairman of the Associate Committee on Diabetes.

Sponsored by the KSMA in cooperation with the American Diabetes Association, the 1958 drive will be the eighth to be conducted by the Association. Last year nearly 52,500 Kentuckians received free urine sugar tests and 137 new diabetics were reported.

The KSMA is requesting all component medical societies to name a diabetes committee for local implementation of the drive. During Diabetes Week all members are urged to give a free urine sugar test to anyone requesting it. This year the Committee's aim is to get greater physician participation in the drive—unique because it involves no fund solicitations.

Serving with Doctor Hoffman on the Diabetes Committee are: Herald K. Bailey, M.D., Ashland; George P. Carter, M.D., Louisa; Marcus A. Coyle, M.D., Springfield; Thomas J. Crume, M.D., Owensboro; Albert H. Joslin, M.D., Beaver Dam; Franklin B. Moosnick, M.D., Lexington; Stanley T. Simmons, M.D., Louisville; Arthur T. Hurst, M.D., Louisville; and Esten S. Kimbel, M.D., Frankfort.

Dr. Orr Named President-Elect by AMA House of Delegates

Louis M. Orr, M.D., Orlando, Florida, featured speaker at the 1958 annual KSMA Senior Day, was named president-elect of the American Medical Association by its House of Delegates in a unanimous election during the AMA Annual Session in San Francisco on June 26.



Dr. Orr

Doctor Orr will succeed Gunnar Gundersen, M.D., LaCrosse, Wisconsin, who was inaugurated as AMA president at an earlier session during the meeting, as AMA president in June, 1959. Other officers elected include: W. Linwood Ball, M.D., Richmond, Virginia, who was elected vice president and E. Vincent Askey, M.D., Los Angeles, who was re-elected speaker of the House of Delegates.

New vice speaker of the House is Norman Welch, M.D., Boston, who is former chairman of the National Blue Shield Commission. Two new trustees elected were: Warren Furey, M.D., Chicago, and Robert Robins of Camden, Arkansas. Raymond M. McKeown, M.D., Coos Bay, Oregon, succeeds himself for a five-year term.

Districts 1, 2, and 3 Plan Meet in Madisonville, Oct. 16

Plans are currently underway for a postgraduate seminar at the District One State TB Hospital in Madisonville on October 16, sponsored jointly by the First, Second, and Third Councilor Districts and the Hospital staff.

Announcement of the meeting was made by District Councilors J. Vernon Pace, M.D., Paducah; Walter L. O'Nan, M.D., Henderson, and Ralph D. Lynn, M.D., Elkton, who urged physicians in their respective districts to take advantage of this opportunity for postgraduate education.

The full program of the seminar will be carried in the September issue of the Journal.

Awards Presentations Given to 3 at AMA Meeting

One of medicine's highest honors—the AMA Distinguished Service Award—was presented to Frank Hammond Krusen, M.D., professor of physical medicine and rehabilitation at the Mayo Foundation, University of Minnesota, at the 1958 AMA Annual Session in San Francisco in June.

Doctor Krusen is chairman of the AMA's Council on Physical Medicine and Rehabilitation and a member of the special committee on rehabilitation. In 1953 he received the President's Physicians Award for services to the handicapped.

Two laymen were also honored in actions by the AMA House of Delegates for their contributions to medicine and health. Selected as recipients of the 1958 Citation for Distinguished Service were Mrs. Charles W. Sewell, Otterbein, Indiana, and Gobind Behari Lal, Ph. D., Los Angeles.

Mrs. Sewell, the first woman to receive the award, will be remembered by many Kentucky physicians, for her talks at Kentucky's Rural Health Conference. She has been in the rural health field for 45 years and was instrumental in the development of the AMA rural health activities.



Program participants and KSMA officers at the combined meeting of the 12th and 15th Councilor Districts at duPont Lodge, Cumberland Falls on June 19 included: Irving Dein, M.D., Louisville; Malcolm Stanley, Louisville; Keith P. Smith, M.D., Corbin, Councilor for the 15th District; Edward B. Mersch, M.D., Covington, KSMA president, who also spoke at the meeting; Garnett Sweeney, M.D., Liberty, councilor for the 12th District; and William C. Adams, M.D., Louisville. Robert Lich, Jr., M.D., Louisville, who was also a speaker at the meeting was not present when the picture was taken.

Doctor Lal, science editor emeritus of the Hearst newspapers and presently science editor of the Los Angeles Examiner, is considered the dean of American science writing. A native of India, he has been a newspaper writer since 1925 when he became a feature writer for the San Francisco Examiner. He was a co-winner of the Pulitzer Prize for scientific writing in 1937.

KAGP to Sponsor Lexington Seminar at Campbell House August 24

All Kentucky physicians are invited to attend the first annual Lexington Seminar sponsored by the Kentucky Academy of General Practice with the University of Louisville Medical School faculty at the Campbell House in Lexington on Sunday, August 24.

Announcement of the meeting was made by Robert M. Sirkle, M.D., Lexington, Seminar chairman, who said that the scientific portion of the program was acceptable for five hours of Category 1 credit. Wives and families of physicians are invited to attend the meeting which will include a social hour and dinner.

Participating in the scientific program will be the following physicians and subjects: George McAuliffe, M.D., "The Diagnosis and Treatment of Common Skin Conditions;" Kenneth Crawford, M.D., "Use and Abuse of Antibiotics in Pediatrics;" Rudy Vogt, M.D., "Commonly Used Hormones in Ob and Gyn;" Rudy Ellis, M.D., "Metallic Fixation of Pathologic Fractures;" Ralph Denham, M.D., "The Management of the Elderly Cardiac."

Seventy Kentucky Physicians Attend AMA Annual Session in June

More than 70 Kentucky physicians journeyed to San Francisco to attend the 107th Annual Session of the AMA on June 23-27, according to registration lists published in the AMA Bulletin.

Total registration at the meeting was 43,555 and physician registration totaled 13,218. This year's physician registration bettered the figure for 1954 when the meeting was last held in San Francisco, when 12,063 were registered.

Following is the list of Kentucky physicians attending as listed in the Daily Bulletin, an AMA publication issued during the meeting.

SUNDAY

D. C. Asher, Pineville; John B. Floyd, Richmond; John B. Floyd, Jr., Lexington; F. W. Hastings, Harlan; August Helmbold, Newport; Leo N. Kirch, Harlan; Maurice Nataro, Louisville; Ralph R. Robinson, Middlesboro; Robert J. Salisbury, Mt. Sterling; M. W. Schell, Owensboro; Frank L. Yarborough, Owensboro.

MONDAY

George P. Archer, Prestonsburg; Asa Barnes, Louisville; Clifford A. Best, Hazard; T. H. Biggs, London; Earl J. Farrell, Jr., Fort Thomas; W. D. Hawley, Harlan; R. D. Lynn, Elkton; Ethel H. O'Brien, Louisville; H. B. Pendleton, Owensboro; Everett L. Pirkey, Louisville; R. W. Robertson, Paducah; M. C. Spradlin, Somerset; W. Vinson Pierce, Covington; Oren A. Beatty, Louisville; J. Andrew Bowen, Louisville; Carl Boylen, Carrollton; Richard E. Doughty, Louisville; Sidney Duman, Louisville; Wallace E. Herrell, Lexington; Robert C. Long, Louisville; Paul F. Maddox, Campton; A. Clayton McCarty, Louisville; D. G. Miller, Jr., Morgantown; David Neustadt, Louisville; W. W. Nicholson, Louisville; Gabe A. Payne, Hopkinsville; Jack H. Purcell, Louisville; Gradie R. Rowntree, Louisville; Marjorie Rowntree, Louisville; Ian Scott, Louisville; L. H. South, Louisville; Dillard Davis Turner, London; William R. Willard, Lexington; Charles A. Wood, Auburn; Frank L. Yarbrough, Owensboro.

TUESDAY

Stanley L. Betts, Fort Knox; E. D. Carrasco, Fort Knox; Jesse T. Funk, Bowling Green; Russell E. Graf, Fort Knox; George J. Hoekstra, Fort Knox; Carl G. Hoffman, Southgate; Ernst Jokl, Lexington; Robert Lich, Jr., Louisville; Earl P. Oliver, Scottsville; G. W. Pedigo, Louisville; Edward H. Ray, Lexington; Henry N. Rubel, Louisville; Carmine J. Scalzitti, Louisville; L. H. Wagers, Hazard; A. J. Whitehouse, Lexington; A. B. Jones, Middlesboro;

L. H. South, Louisville; F. E. Totten, McDowell.

WEDNESDAY

David D. Drye, Bradfordsville; Daryl P. Harvey, Glasgow; J. Kenneth Hutcherson, Louisville; M. M. Lawrence, Jamestown; and C. D. Townes, Louisville; Henry H. Moody, Cynthiana; George P. Whiteside, Glasgow.

THURSDAY

Charles Billington, Paducah; O. B. Murphy, Lexington; Robert H. Cofield, Covington; Robert A. Magallon, Louisville.

Eight Newly Appointed Consultants Announced by Editor

The names of eight new members of the Board of Consultants on Scientific Articles of the Journal of the KSMA have been announced by Guy Aud, M.D., Louisville, Editor.

The new members, whose terms became effective on July 1, were appointed by the Editor and the Advisory Committee to the Editor for three-year terms starting July 1, 1958.

The new appointees are: Nathaniel L. Bosworth, M.D., Lexington; W. L. Cooper, M.D., Lexington; Ralph Denham, M.D., Louisville; Robert S. Dyer, M.D., Louisville; Merle W. Fowler, M.D., Paducah; Oscar Hayes, M.D., Louisville; Charles E. Rankin, M.D., Lexington; and Robert B. Warfield, M.D., Lexington.

Retiring this year after serving three-year terms are: Harry D. Abell, M.D., Paducah; Henry B. Asman, M.D., Louisville; Marion F. Beard, M.D., Louisville; Rankin Blount, M.D., Lexington; Glenn Bryant, M.D., Louisville; William C. Buschemeyer, M.D., Louisville; Richard Elliott, M.D., Lexington; and Douglas Scott, M.D., Lexington.

In announcing the names of the new consultants, Doctor Aud also praised the retiring consultants for their cooperation and interest in the Journal, as well as for the valuable contributions they had made to the Journal as Board members.

KAGP Kenlake Seminar, July 10 Attended by 100 M.D.'s

Approximately 100 physicians and their families from three states attended the annual Kenlake Seminar of the Kentucky Academy of General Practice at the Kenlake Hotel on July 10, according to Harry Whayne, M.D., Murray, program chairman.

Physicians attending heard scientific presentations by four nationally known physicians. The program was acceptable for four hours of Category 1 Credit.

Included on the program were: Frank Lyman, M.D., associate medical director of Mead Johnson Company; Hugh Lynn, M.D., professor of surgery at the University of Louisville; A. Lee Lichtman, M.D., professor of surgery at the New York Polyclinic Medical School; and George Hamwi, M.D., associate professor of medicine at Ohio State Medical School, who is also scheduled to speak at the KSMA Annual Meeting in September.

The scientific presentations were followed by a social hour and buffet dinner for the doctors and their families. Charles G. Bryant, M.D., Louisville, is KAGP president and Daryl P. Harvey, M.D., Glasgow, is president-elect. The KAGP now has approximately 500 members.

District 14 Meets in Hazard

Fifty-six physicians and their wives from nine Kentucky counties attended the annual afternoon and dinner meeting of the 14th Councilor District at the VFW Club in Hazard on June 18, according to Charles C. Rutledge, M.D., Hazard, District Councilor.

Edward B. Mersch, M.D., Covington, KSMA president, was featured speaker on the program. Participants in the scientific portion of the program were: Ralph Denham, M.D., Herman Mahaffey, M.D., and Harry S. Andrews, M.D., all of Louisville.



Enjoying a few moments of fellowship following the program of the 14th Councilor District meeting in Hazard on June 18 were: Charles Rutledge, M.D., councilor for the 14th District; Edward B. Mersch, M.D., KSMA president, and a featured speaker at the meeting; Robert L. Collins, M.D., Hazard; Ralph Denham, M.D., J. Herman Mahaffey, M.D., and Harry S. Andrews, M.D., all of Louisville; and Donald L. Martin, M.D., vice president of the Perry County Medical Society.



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for the management of both major and minor emotional disturbances

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SEARLE

*A Symposium on the Pharmacologic Effects of Dartal on the Liver, Chicago, Searle Research Laboratories, Feb. 7, 1958.

AMA House of Delegates Considers Problems Facing Medicine Today

Medicine's top policy-making body, the House of Delegates of the American Medical Association, spent four long and busy days beginning June 23 at the Annual Meeting of the AMA in San Francisco. Many of the most important problems facing medicine today were considered.

W. Vinson Pierce, M.D., Covington, and Robert C. Long, M.D., Louisville, KSMA's two delegates to the AMA, saw to it that the KSMA point of view was presented and considered. Alternates, Foster D. Coleman, M.D., Louisville, and George Archer, M.D., Prestonsburg, along with Robert W. Robertson, M.D., Paducah, the KSMA President-Elect, were also at all of the meetings of the House and participated in the Reference Committee hearings.

The entire Kentucky delegation, under the leadership of Kentucky's senior delegate Doctor Pierce, caucused twice during the meeting to plan the participation of its members in the work that was ahead. Also sitting in on all of the House of Delegates meetings, the caucus with Ky. delegates, and Reference Committee meetings was Dean William R. Willard, M.D., of the University of Kentucky at Lexington.

Relationships between the United Mine Workers of America Welfare and Retirement Fund and organized medicine were debated at considerable length. Following the recommendation of a Reference Committee report that resolutions calling for a broad educational program be instituted at once by the AMA to inform the general public on the need for the preservation of freedom of choice, the Reference Committee recommended that the implementation of these resolutions be delayed at least six months until the Commission on Medical Care Plans could make its report.

An amendment was offered to the Reference Committee Report by the Colorado delegation which read as follows: "that this section of the Reference Committee report be amended to show that our AMA Headquarters Staff is directed, under supervision of the Board of Trustees, to proceed *immediately* with the campaign which was originally ordered at Philadelphia last December, that no further delays will be tolerated, and that the Council on Medical Service be relieved of any further responsibility in this matter."

Doctor Long, whose home county—Jefferson—offered a resolution on this same subject which was accepted in principle by the Reference Committee, spoke in support of the Colorado Amendment along with a number of others in a spirited debate. By a vote of 110 to 72 the amendment carried.

Seven different resolutions were presented to the House on the subject of including physicians in the Social Security Act. Instead, the House adopted a resolution pointing out "the American physicians always have stood on the principle of security through personal initiative" and reaffirmed its unequivocal opposition to the compulsory inclusion of self-employed physicians in the Social Security system.

On the question of polling all the members of the AMA on whether or not they preferred the inclusion of self-employed physicians under the Social Security Act, the House suggested that any state wishing to do so might take a poll of its members and report the results to the AMA.

Dealing with the matter of voluntary health organizations, the House reaffirmed its commendation and approval of the principal voluntary health agencies and stated that they should be free "to conduct their own programs of research, public and professional education and fund raising in their particular spheres of interest."

A resolution calling for the repeal of the Medicare program was rejected and the House reaffirmed the action it took last year in recommending that the decision on type of contract and whether or not a fee schedule is included in future contract negotiation should be left to the individual state determination.

Noting that the Federal government had spent over $600 million on hospitalization of veterans in VA hospitals in 1957, of which about 75 per cent had non-service-connected disabilities, the House urged Congressional action to restrict hospitalization of veterans at VA hospitals to those with service-connected disabilities. The House resolution was adopted as a way for obtaining greater economy in Federal government.

A resolution requesting the Board of Trustees to make an immediate survey and re-evaluation of the functions and effectiveness of the AMA legislative system and the Washington Office, in the light of present day needs was adopted by the House. The House urged implementation as rapidly as possible of changes and additions indicated by the survey to achieve "effective public and government relations."

Among the other actions taken by the House were the adoption of amendments to the Constitution and By laws which eliminate separate offices of Secretary and Treasurer, combining them into one, and change the titles of General Manager and Assistant General Manager to Vice President and Assistant Executive Vice President; a recommendation for the Appointment of a Committee on Atomic Medicine and Ionizing Radiation; and approval in principle of the admission of the Virgin Islands Medical Society as a constituent society of the AMA.

Other actions were a commendation to the Federal Food and Drug Administration, and to the Committee on Medical and Related Facilities of the Council on Medical Service, approval of the "Suggested Guides for the Organization and Operation of Medical Society Committees on the Aging," directed the Board of Trustees to study problems of licensure by reciprocity, and approved a National Interprofessional Code for physicians and attorneys.

The House also requested that any fund provided under Public Assistance provisions of the Social Security Act for medical care of the indigent be administered by a voluntary agency such as Blue Shield on a cost plus basis or by a specific agency established by the medical society of the state in which indigent care is rendered.

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Riseman, J. E. F., Altman, G. E., and Koretsky, S.: Nitroglycerin and Other Nitrites in the Treatment of Angina Pectoris, Circulation (Jan.) 1958.

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Posing for the photographer following the meeting of the Ninth Councilor District at Maysville on July 1 were: J. M. Stevenson, M.D., Brooksville, District Councilor; Edward B. Mersch, M.D., KSMA president, who spoke; and William E. Pugh, M.D., J. Thomas Giannini, M.D., and Herbert Clay, M.D., who presented the scientific portion of the program. William H. Sewell, M.D., and Claude E. Cummins, M.D., president and secretary of the Mason County Medical Society, the host group, were not present when the picture was taken.

Ky. Heart Assoc. Announces Grants Totalling $74,783

Grants of $74,783, including $53,627 for research purposes were announced recently by the Kentucky Heart Association.

The largest single research grant from the State units is $15,300 for the chair of heart research at the U of L. The recipient is Joseph P. Holt, M.D., Louisville. Next largest grant is for student research scholarships at the U of L amounting to $10,350.

A recent announcement from the national heart group said that it will continue to sponsor a study at the U of L on the functions of the kidney and its effect on the heart and other organs. This year's grant totals $14,800.

For the first time, the University of Kentucky is receiving a grant of $3,000 this year. The grant will go for the study of leukocytic sensitivity to rheumatic fever.

Other grants are: $6,600 to Thomas D. Stevenson, M.D., U of L, for research on the coagulation of blood in arteriosclerotic heart disease; $2,000 to Leonard Leight, M.D., U of L, for cardiovascular laboratory work; and $1,425 to Frank Falkner, M.D., U of L, to continue his investigation of the growth and development pattern of children with congenital heart disease.

Dr. Morse Renamed Governor

Carlisle Morse, M.D., Louisville, has been reappointed by the American Diabetes Association as Governor for the State of Kentucky. This will be his second term in that position and will expire in June of 1961.

Doctor Morse is a past chairman of the KSMA Committee on Diabetes. His new three-year term as Governor started in June. In making the appointment, Alexander Marble, M.D., president of the American Diabetes Association, New York, expressed the Association's thanks for his "splendid assistance as Governor in the past."

Future AMA Meeting Dates Set at Annual Session

Minneapolis will be the site of the annual Clinical Session of the American Medical Association on December 2-5, according to an announcement in the AMA Daily Bulletin.

In June of 1959 the AMA will hold its 108th Annual Session in Atlantic City, New Jersey, where Louis M. Orr, M.D., Orlando, Florida, will take the oath of office as AMA president.

During the sessions in June, the AMA House of Delegates voted to substitute Miami Beach for Chicago as the site of the 1960 Annual Meeting. Chicago was by-passed when plans for a new lakeside convention hall, scheduled for completion by 1960, were delayed. Miami Beach, which has always had ample hotel facilities will have a new convention hall completed in the near future.

Two Louisville Physicians Receive Research Grants

Two Louisville physicians, Charles John McGaff, M.D., and Warren Rehm, M.D., have recently been awarded foundation research grants. Doctor McGaff was awarded a $14,680 grant in cardiology by the March of Dimes and Doctor Rehm was given a $25,300 grant by the National Science Foundation.

One of a small number of scholars assisted by March of Dimes Foundation studies in research fields not directly related to infantile paralysis, Doctor McGaff plans to study at Johns Hopkins Hospital in Baltimore. He graduated from the University of Louisville School of Medicine in 1953 and was second highest in his class.

Doctor Rehm's grant will assist him in his research into the electrical properties of stomach tissue. He has been engaged in research dealing with stomach

(Continued on Page 791)



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(Continued from Page 788)

ulcers since 1942, and is lecturing at the University of Washington in Seattle and visiting West Coast laboratories this summer. His research, shared with six other persons, is one in fundamental biology and is supported by the U. S. Public Health Service and was formerly supported by the Army until the Army's research funds were reduced.

Joint Meeting Attended by 71

The joint dinner meeting of the 12th and 15th Councilor Districts of the KSMA at Cumberland Falls on June 19 was attended by 71 physicians and their wives, according to a joint announcement from District Councilors Garnett Sweeney, M.D., Liberty, and Keith P. Smith, M.D., Corbin.

Four members of the University of Louisville faculty and KSMA President, Edward B. Mersch, M.D., Covington, made up the program. Presenting scientific papers were: William C. Adams, M.D., Robert Lich, M.D., Malcolm M. Stanley, MD., and Irving Dien, M.D.

Illinois Assoc. Donates to AMEF

The largest check ever given to the American Medical Education Foundation by a state organization—$177,500—was presented to AMEF President George F. Lull, M.D., on behalf of Illinois physicians at the AMA House of Delegates meeting in San Francisco. Presentation was made by Raleigh C. Oldfield, M.D., president of the Illinois State Medical Society.

Charles Caldwell—Scientific

(Continued from Page 767)

7. Walker, A. E.: The Development of the Concept of Cerebral Localization in the Nineteenth Century Bulletin of the History of Medicine. Vol. XXXI, No. 2, p. 100, March-April, 1957.

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9. Lawson, Hampden C.: The Early Medical Schools of Kentucky. Fulletin of the History of Medicine. Vol. XXIV, No. 2, pp. 168-175, March-April, 1950.

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Dr. Simpson on Hospital Council

Gaithel L. Simpson, M.D., Greenville, has been appointed by Governor A. B. Chandler to serve as a member of the Hospital Licensure Council. Other members appointed with Doctor Simpson to serve terms ending June 30, 1961 were W. S. Murphy, Lexington, and Monsignor C. A. Towell, Covington.

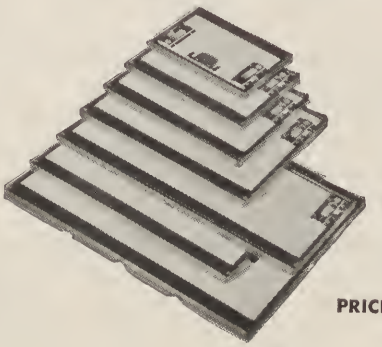
MSEC Meets in San Francisco

The Medical Society Executives Conference, comprised of 450 members, held its annual session in San Francisco on Friday and Saturday, June 20-21.

Panel discussion, problem clinics, headquarters office procedures, reports and the election of officers for 1958-59 were features of the two-day meeting. The KSMA was represented at the meeting by the Executive Secretary J. P. Sanford, Louisville.



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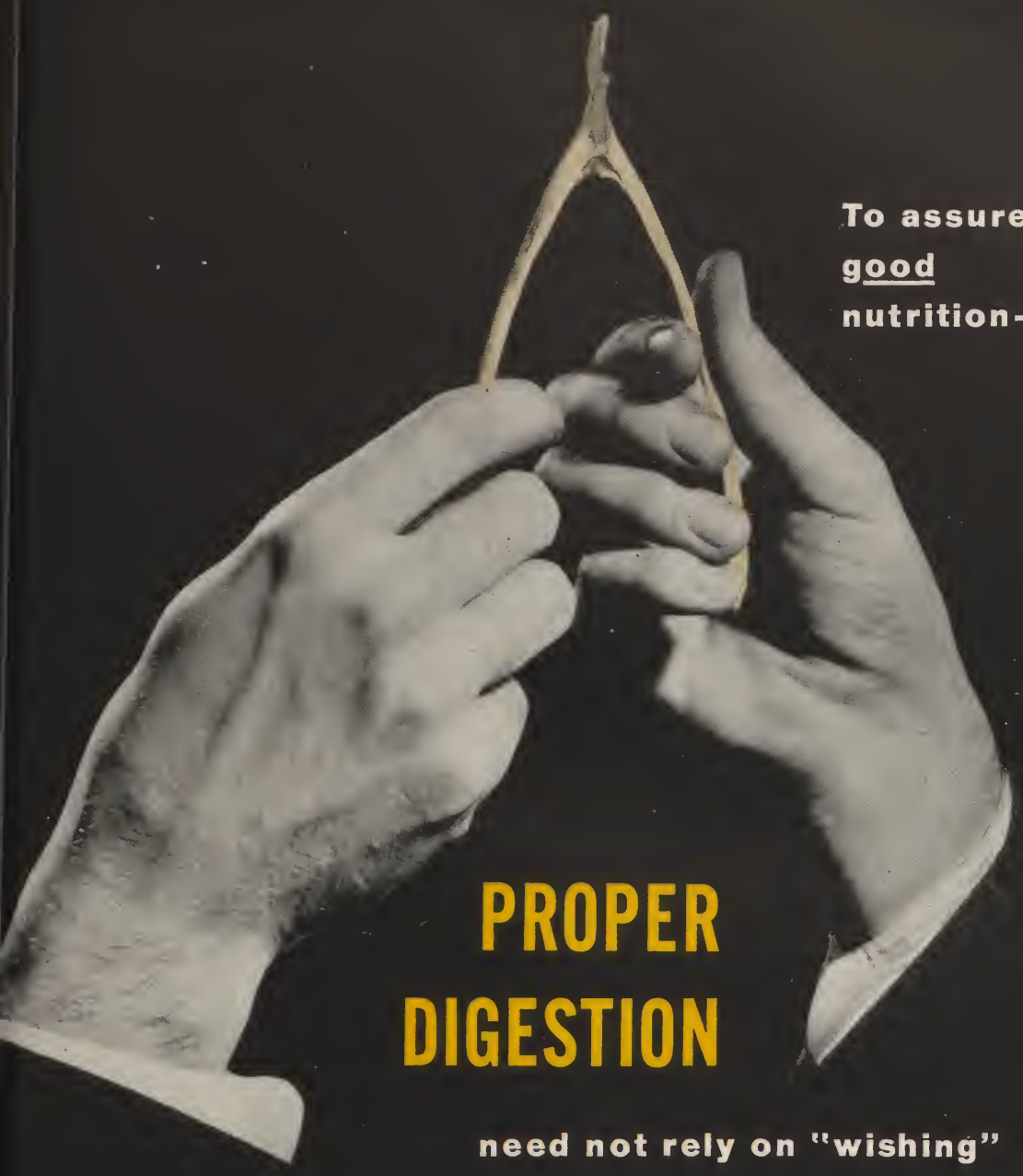
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PUBLISHED REFERENCES: 1. Carpenter, E. B.: Southern Medical Journal 51:627, 1958. 2. Forsyth, H. F.: J.A.M.A. 167:163, 1958. 3. Little, J. M., and Truitt, E. B., Jr.: J. Pharm. & Exper. Therap. 119:161, 1957. 4. Morgan, A. M., Truitt, E. B., Jr., and Little, J. M.: J. Am. Pharm. Assn., Sci. Ed. 46:374, 1957. 5. O'Doherty, D. S., and Shields, C. D.: J.A.M.A. 167:160, 1958. 6. Park, H. W.: J.A.M.A. 167:168, 1958. 7. Truitt, E. B., Jr., and Patterson, R. B., Proc. Soc. Exper. Bio. & Med. 95:422, 1957. 8. Truitt, E. B., Jr., Patterson, R. B., Morgan, A. M., and Little, J. M.: J. Pharm. & Exper. Therap. 119:189, 1957.

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STUDY 2[2]		"pronounced"			
Herniated disc	39	25	13	—	1
Ligamentous strains	8	4	4	—	—
Torticollis	3	3	—	—	—
Whiplash injury	3	2	1	—	—
Contusions, fractures, and muscle soreness due to accidents	5	3	2	—	—
STUDY 3[5]		"excellent"			
Herniated disc	8	6	2	—	—
Acute fibromyositis	8	8	—	—	—
Torticollis	1	—	—	1	—
STUDY 4[6]		"significant"			
Pyramidal tract and acute myalgic disorders	30	27	—	2	1
TOTALS	138	104 (75.3%)	28 (20.3%)	4	2

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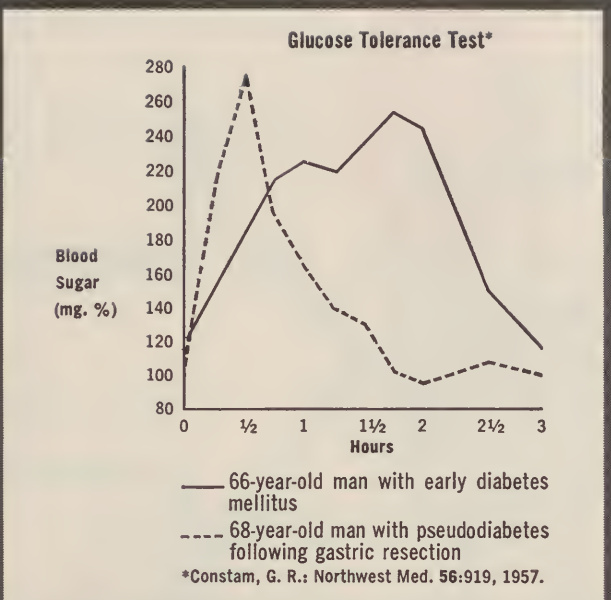
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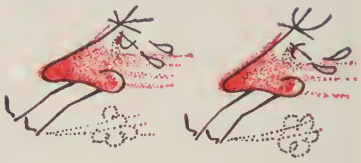
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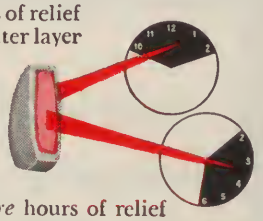
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1 Grieble, H.G., and Jackson, G.G.: Prolonged Treatment of Urinary-Tract Infections with Sulfamethoxypyridazine. *New England J. Med.* 258:1-7, 1958
2. Editorial: *New England J. Med.* 258:48-49, 1958.

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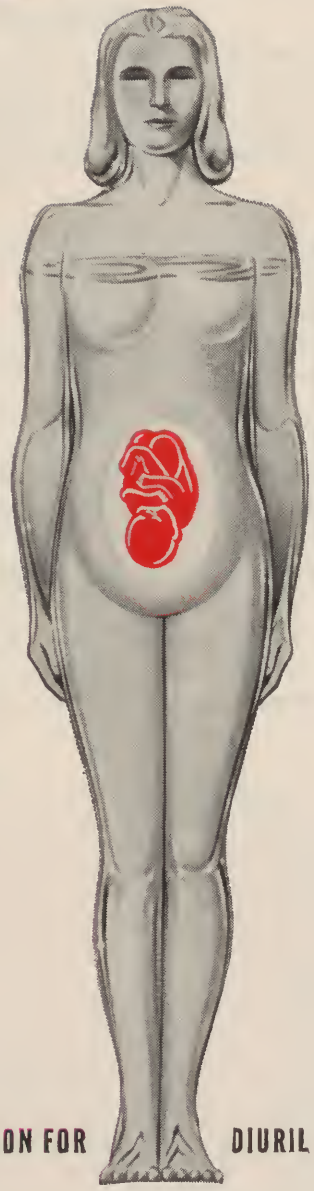
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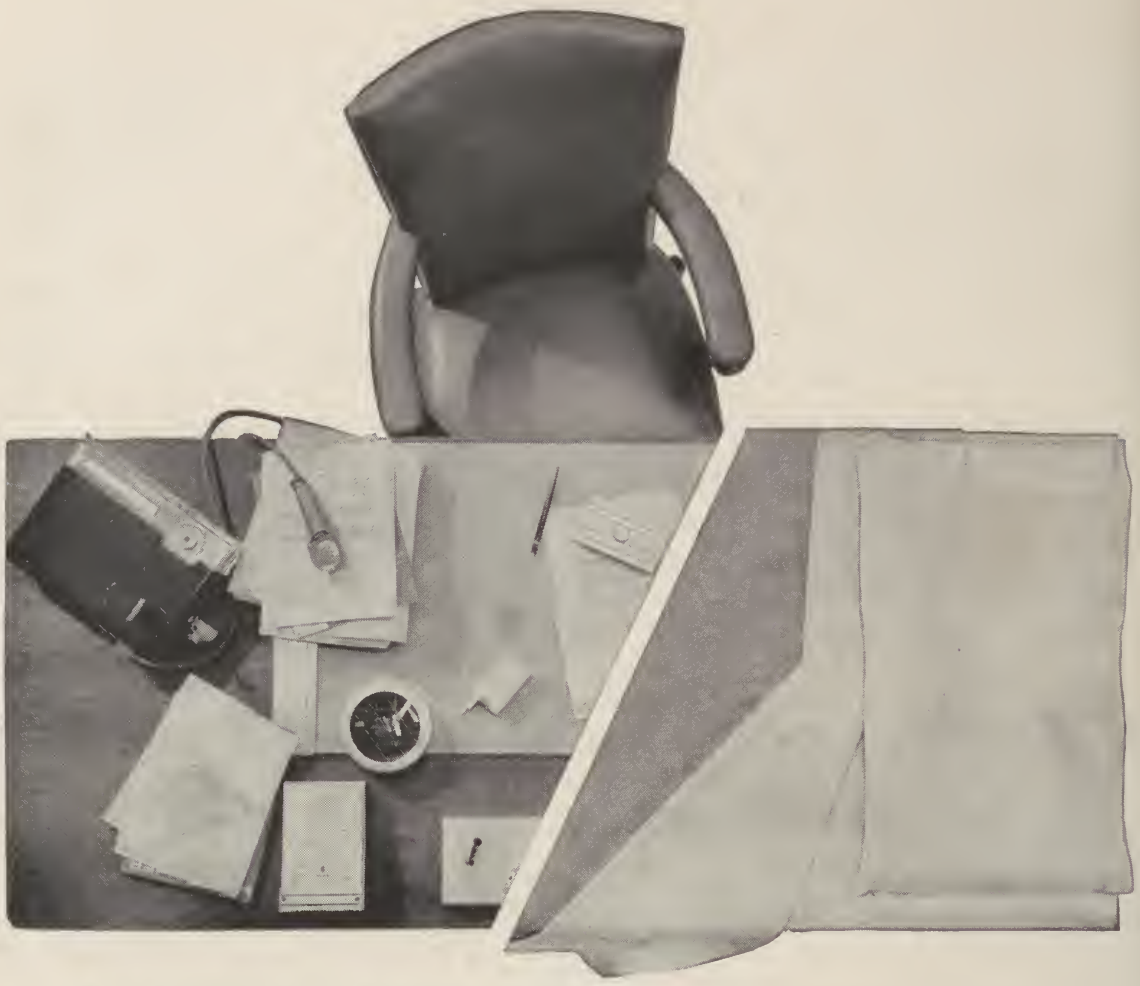
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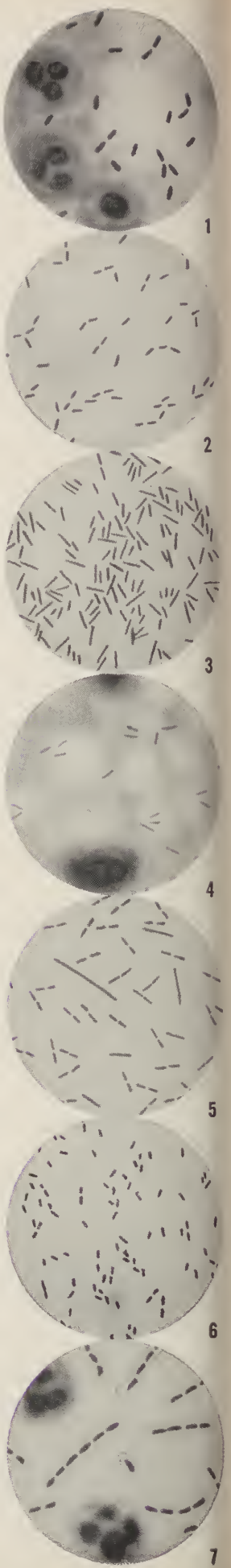
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REFERENCES: (1) Schneierson, S. S.: *J. Mt. Sinai Hosp.* 25:52, 1958. (2) Waisbren, B. A.: *Wisconsin M. J.* 57:89, 1958. (3) Ritts, R. E., Jr.; Mao, F. H., & Favour, C. B.,in Welch, H., & Marti-Ibanez, F.: Antibiotics Annual 1957-1958, New York, Medical Encyclopedia, Inc., 1958, p. 774. (4) Rhoads, P. S.: *Postgrad. Med.* 21:563, 1957. (5) Roy, T. E.; Collins, A. M.; Craig, G., & Duncan, I. B. R.: *Canad. M.A.J.* 77:844, 1957. (6) Hasenclever, H. F.: *J. Iowa M. Soc.* 47:136, 1957. (7) Holloway, W. J., & Scott, E. G.: *Delaware M. J.* 29:159, 1957. (8) Waisbren, B. A., & Strelitzer, C. L.: *Arch. Int. Med.* 99:744, 1957. (9) Derham, R. J., & Rogerson, M. M.: *J. Dis. Child.* 93:113, 1957. (10) Murphy, J. J., & Rattner, W. H.: *J.A.M.A.* 166:616, 1958. (11) Rabe, E. F.: *Pennsylvania M. J.* 61:209, 1958. (12) Rosenthal, I. M.: *GP* 17:77 (March) 1958.

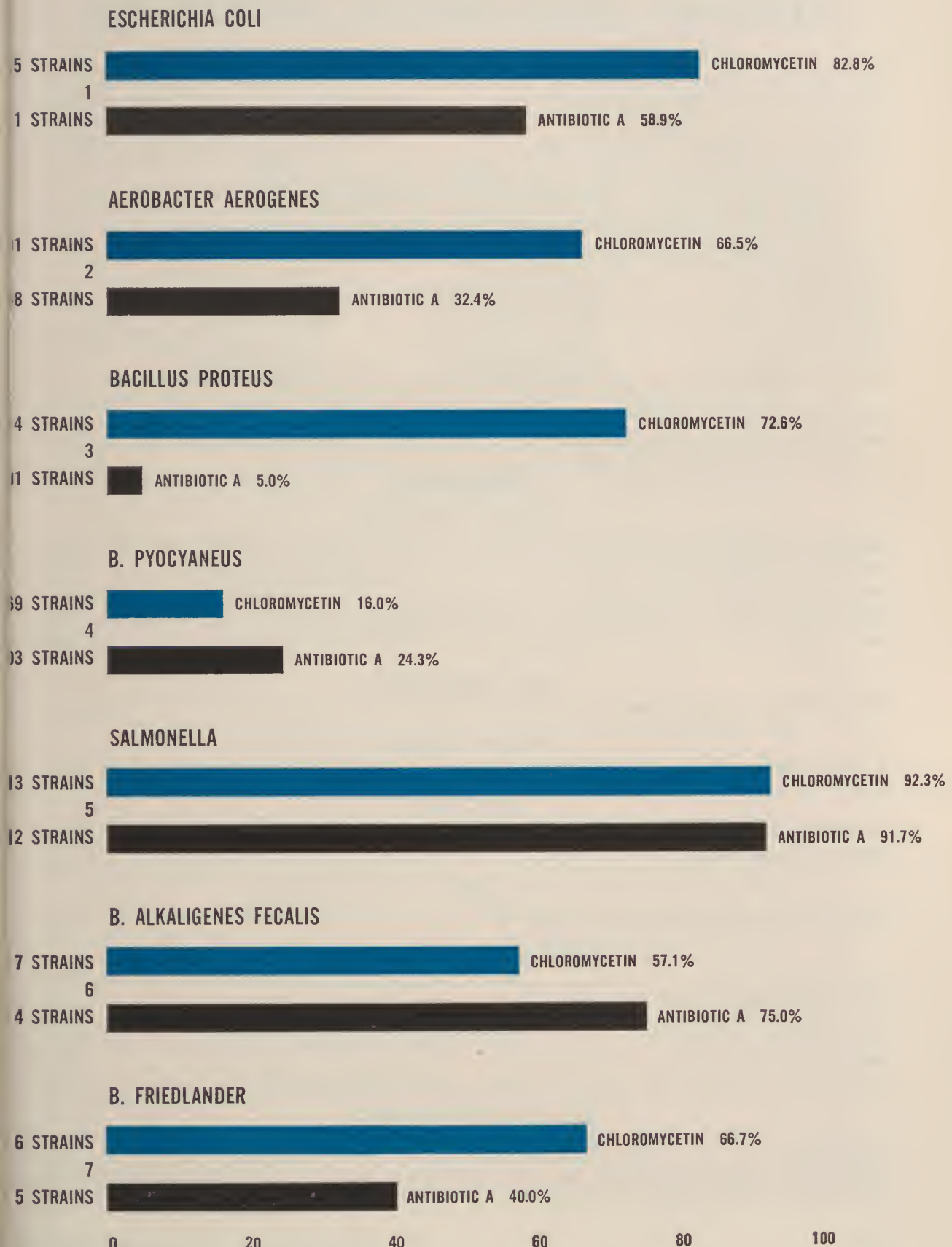
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IN VITRO SENSITIVITY OF SEVEN GRAM-NEGATIVE PATHOGENS TO CHLOROMYCETIN AND TO ANOTHER WIDELY USED ANTIBIOTIC*



*Adapted from Schneierson.[3]

The JOURNAL of the KENTUCKY STATE MEDICAL ASSOCIATION

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(1) Hagedorn, A. B.: Proc. Staff Meet. Mayo Clin. **32**:705 (Dec. 11) 1957.
(2) Best, W. R.; Louis, J., and Limarzi, L. R.: M. Clin. North America (Jan.) 1958, p. 3.

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message from the President

AS my term of office expires in September, this is my last visit with you on the President's Page. The opportunity and responsibility of writing this page each month has been a pleasure.

To all of those who have been thoughtful enough to comment on the material appearing each month, I want to express my sincere appreciation. I have tried to encourage activity in the direction of preserving so many of the liberties that we take for granted and which are now in jeopardy.

To all of the Officers and Councilors of the Association, I want to express my gratitude for the contributions they have made during the past year. It has been a very enjoyable year—and, I feel sure, a profitable one. So, my appreciation to everyone it was my privilege to work with during my administration.

My very best wishes go to my successor, Robert Wintersmith Robertson, M.D., Paducah. I hope all of you will give Doctor Robertson the same fine support I received—in order that our Association may continue to move ahead and expand its services to the members and the public.

E. B. Mersch M.D.

Turn to Pages 882-886 For a Special Article by Dr. Mersch



IN DEBILITATING DISEASE

Patients receiving NILEVAR®

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Recover faster

Compared to control patients, those receiving Nilevar (brand of norethandrolone) have repeatedly demonstrated more rapid and more complete recovery from serious acute illness and increased comfort and well-being in chronic illness.

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IN THE BOOKS

Books Received

Following is a list of books received by the Association for review. Those considered of particular interest to Journal readers will be reviewed as space permits. All complimentary copies of books received are turned over to the University of Louisville-Jefferson County Medical Society Library. Inquiries concerning a particular book should be made to the KSMA Headquarters Office, 1169 Eastern Parkway, Louisville 17, Ky.

HOW TO LIVE WITH DIABETES: by Henry Dolger, M.D., and Bernard Seeman published by W. W. Norton and Co., Inc., New York.

PEDIATRIC INDEX: by Edwin F. Patton, M.D., published by C. V. Mosby, Co., St. Louis.

THE PSYCHOLOGY OF MEDICAL PRACTICE: Marc H. Hollender, M.D., published by W. B. Saunders Company, Philadelphia and London.

CLINICAL OBSTETRICS AND GYNECOLOGY: Volume 1, Number 2, edited by Louis M. Hellman, M.D., and Robert A. Kimbrough, M.D., published by Paul B. Hoeber, Inc.

CURRENT THERAPY 1958: edited by Howard F. Conn, M.D.; published by W. B. Saunders Company, New York and London, February, 1958; 827 pages; price, $12.

A must for any practicing physician is a recent copy of "Current Therapy." The 1958 volume makes obsolete any of the previous issues.

This is probably the most useful and usable book on treatment that has ever been published. It is a complete reference on treatment, covering the management of all commonly encountered disorders and is not merely a book restricted to recent advances.

This new 1958 volume places for one's use today's best treatments for every disease one is likely to encounter. Each of the 298 contributors is a recognized authority on the subject he wrote about.

The discussions of treatments are concise and practical and are written for quick reading and full understanding. Exact dosages are always given and prescriptions written out where necessary.

Of the 322 articles in the 1958 volume, 227 are new—different and better in some way than the best treatment known a year ago for the same disease. A new Appendix on Pediatric dosages has been added, the Index is more complete, and a schedule for immunization is included.

This is the tenth annual volume of "Current Therapy." Since the first publication a fourth of a million copies have been sold. This, in itself, is good evidence that the 1958 "Current Therapy" truly places today's best treatment at one's finger tips.

Carroll L. Witten, M.D.

MEMOIRS OF A G. P.: by Otis Marshall, M.D., published by Vantage Press, New York, 1958; 155 pages, price, $3.50.

To sit at the feet of an old-timer is often one of the privileges of the younger physician. Those of us who have had such a privilege will readily admit the value of their experience to our own practices. Reading "Memoirs of a G. P." is just such an experience. It is doubtful if this book will create much interest outside the profession since it is strictly autobiographical.

Dr. Marshall's actual medical experiences were neither sensational nor exceptional, but rather those of the average man doing general practice back in the horse and buggy days, continuing on into the era of the X-ray, the automobile, and antibiotics.

The author had a very active medical career which encompassed a coal mining practice, a small town general practice, an industrial practice, fourteen years as field instructor for the American Red Cross, medical director for a psychiatric hospital, and medical director of Penney Farms, a research center in the field of geriatrics.

The high point of the book lies in the last chapter, "In Retrospect." There, he makes a plea against overspecialization, against the rising cost of medical care, and for more modern general practitioners. The latter, he feels, would do better in partnerships or clinics.

The best way to relate Dr. Marshall's attitude concerning our present socio-economic problem in medicine is to quote from his last chapter:

> "Unfortunately a welfare state exists; don't let us push it into a socialized state and one-class system. Ambition, education, and responsibility has built up our nation to be the greatest on the face of the earth. This, of necessity, has made a moderate class system. However, no one is barred from emerging from one class to another. He has the chance to pull himself up by his bootstraps. Don't kill the goose that lays the golden egg."

This one paragraph seems to embody a grand, tried and true, never to be truthfully denied, concept of the role of government in the control of the individual.

Charles G. Bryant, M.D.

THE NEUROSES AND THEIR TREATMENT: edited by Edward Podolsky, M.D., published by The Philosophical Library, New York; 1958; 555 pages; price, $10.

This book is an edited collection of some 37 separate articles by different authors on various topics. The articles range in subject material from some of the emotional problems of infancy to those of old

(Continued on page 830)

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REFERENCES: 1. Carlozzi, M.: Ant. Med. & Clin. Therapy 5:146 (Feb.) 1958. 2. Welch, H.; Wright, W. W., and Staffa, A. W.: Ant. Med. & Clin. Therapy 5:52 (Jan.) 1958. 3. Walch, E.: Dent. Med. Wschr. (April) 1956. 4. Shalowitz, M.: Clin. Rev. 1:25 (April) 1958. 5. Nathan, L. A.: Arch. Pediat. 75:251 (June) 1958. 6. Cornbleet, T.; Chesrow, E., and Barsky, S.: Ant. Med. & Clin. Therapy 5:328 (May) 1958. 7. Stone, M. L.; Sedlis, A., Bamford, J., and Bradley, W.: Ant. Med. & Clin. Therapy 5:322 (May) 1958. 8. Harris, H.: Clin. Rev. 1:15 (July) 1958.

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IN THE BOOKS

(Continued from page 828)

age; from fairly simple neuroses to quite complicated ones; and from psychoanalysis to lobotomy as methods of therapy. The editor states that the motivation for collecting these papers is to further familiarize the physician in practice with the diagnosis and treatment of the neuroses.

The subjects covered include most of the major neuroses, but do not cover all of them. In general the articles seem to be a fairly good sampling of a goodly number of the current areas of focus and interest in the neuroses. A good number of disciplines and approaches are represented. Some of the articles seem to suffer from the frequent pitfall of psychiatry, namely too much armchair theorizing, but for the most part the paper seems to be fairly well documented. The book reminds this reviewer of a copy of the "Readers' Digest" with the whole issue being devoted to the neuroses.

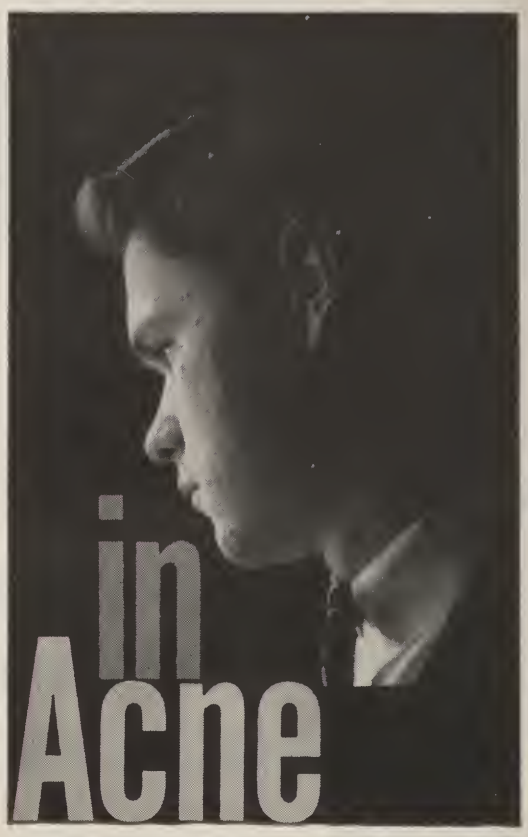
The book cannot be considered comprehensive, but it is a fairly good cross-sectioning of diagnoses, theories, and methods of therapy for the neuroses. Practically all of the articles have been previously published in various periodicals. The value of collecting into a book a series of articles which have been previously published elsewhere is to be questioned. It is felt, however, that for those who are interested in scanning it there is a certainty that they will find at least some articles of interest and value.

As is true of all individual articles, individual readers will tend to have varying agreements and disagreements as to the accuracy and value of the papers. The editor states that the authors are "eminent authorities" and in most instances this is true, but unfortunately it is dubious in the case of some of the others.

Harvey R. St. Clair, M.D.

The number of women foreign physicians training in U. S. hospitals increased 90 per cent in 1957-58, according to a new survey by the Institute of International Education. One thousand six hundred and forty-nine women doctors are taking internship or residency training here. A total of 7,622 foreign physicians—a year's increase of 13 per cent—was in residency or internship in the U. S. in 1957-58. Thirty-four per cent of these were from the Far East.

An "emergency" identification card for the protection of patients on long-term anticoagulant therapy is now being made available to physicians by the Kentucky Heart Association. The card, which is wallet size, points out that the patient "is being treated with anticoagulants which slow down the clotting of the blood." In emergency cases of injury, illness, or bleeding the card advises that a doctor be called since the patient may require an antidote. Any physician may receive a sample or a quantity supply of the cards by writing the Kentucky Heart Association, 401 Speed Building, Louisville 2, Ky.



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1. Hodges, F. T.: *GP* 14:86, Nov., 1956.

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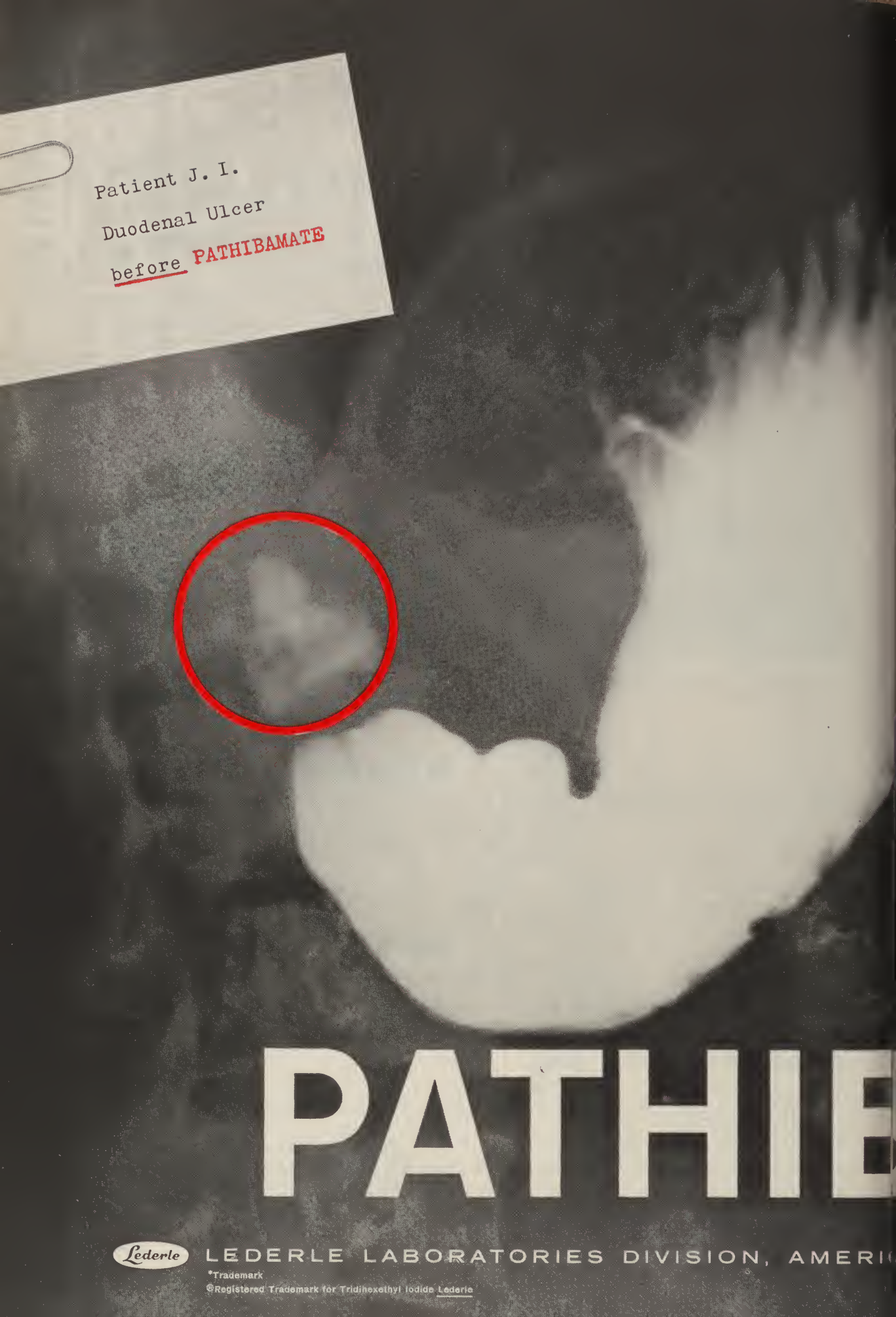
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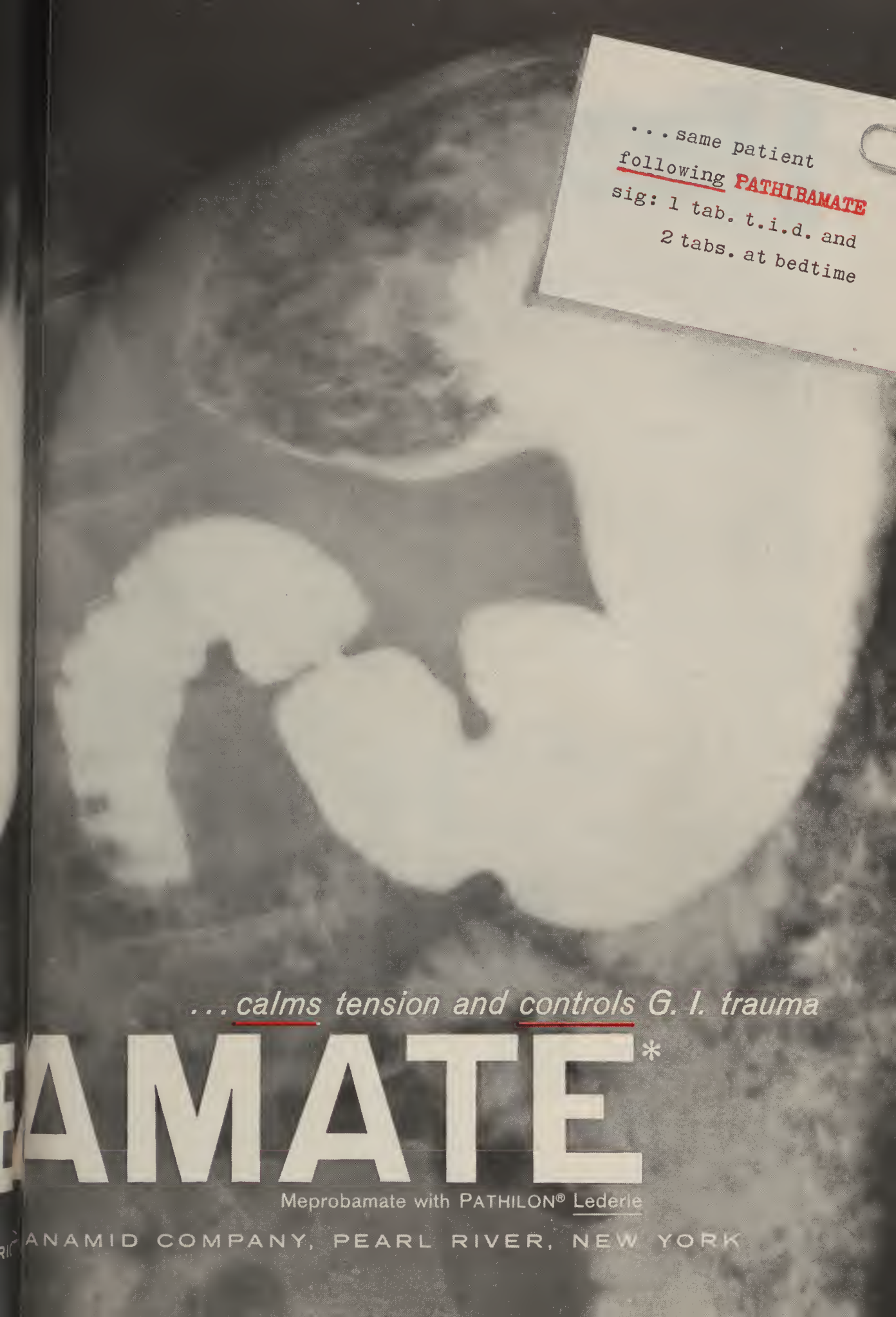
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PUBLIC HEALTH PAGE

New Narcotic Laws

RUSSELL E. TEAGUE, M.D.
Commissioner of Health, Commonwealth of Kentucky

IN the 1958 Kentucky General Assembly two bills of particular interest to physicians were those relating to control of narcotic and barbiturate drugs. Senate Bill 99 created an entirely new law on barbiturates and repealed the old law. Among other things it clarifies the authority of the State Department of Health in administration and enforcement of the new law. Senate Bill 101 amended the State Uniform Narcotic Drug Act, making it more nearly like the Federal narcotic law. Like the barbiturate law, it increased the penalties for violations, conforming with recent amendments to the Federal law.

Sections of the new laws of particular interest to physicians are those dealing with the keeping of records. Regarding barbiturates, KRS217.481 states:

> "A practitioner may possess barbiturates in reasonable amounts, and deliver and dispense same to his patients in the general course of his practice provided the container in which such barbiturates are dispensed bears a label showing the name of the practitioner, the name of the person for whom prescribed, date and directions for use. If prescribed for an animal, the specie and name of the owner shall be shown on the label. The practitioner shall keep a record of such barbiturates received by him, and a record of all such drugs administered, dispensed, or professionally used by him otherwise than by prescription."

In the Narcotics Act, Section 1 of KRS-218.090, was amended to read:

> "Every physician, dentist, veterinarian, or other person who is authorized to administer or professionally use narcotic drugs, shall keep a record of such drugs received by him, and a record of all such drugs administered, dispensed, or professionally used by him otherwise than by prescription. It shall, however, be deemed a sufficient compliance with this subsection if any such person using small quantities of solutions or other preparations of such drugs for local application, shall keep record of the quantity, character, and potency of such solutions or other preparations purchased or made up by him, and of the dates when purchased or made up, without keeping a record of the amount of such solution or other preparation applied by him to individual patients."

Section 5 of this law provides that in the event of loss, destruction, or theft of narcotic drugs, the physician shall forward a copy of the detailed list of such drugs to the State Department of Health.

These laws became effective on June 19, 1958. Physicians desiring copies of the complete laws are invited to call or write the Division of Investigation and Narcotic Control, Kentucky State Department of Health.



Hospital practice of infant feeding

Standard one-formula mixture

Normal infant nutrition requires approximately 50 calories per pound of weight. Caloric distribution should be about 15% from protein, 50% from carbohydrates and 35% from fat as formulated for the mixtures in the tables below.

For young infants, a favorable hospital formula consists of a milk and Karo Syrup mixture, isocaloric with human milk, e.g. 20 calories per ounce.

WHOLE MILK FORMULA

FORMULA	OZ.	TOTAL CALORIES	CARB. CAL.	FAT CAL.	PROT. CAL.
Whole milk	24	480	5%	36%	14%
Water	22	—	—	—	—
Karo Syrup	1½	180	45%	—	—

EVAPORATED MILK FORMULA

FORMULA	OZ.	TOTAL CALORIES	CARB. CAL.	FAT CAL.	PROT. CAL.
Evaporated milk	11	484	5%	36%	14%
Water	22	—	—	—	—
Karo Syrup	1½	180	45%	—	—

An infant will usually take 2 to 3 ounces more than his *age in months* at 3 to 4 hour intervals to satisfy his appetite and nutritional needs. It is psychologically unwise to force prescribed amounts. Normally, the gain in weight of 6 to 8 ounces a week during the earlier months gradually diminishes to 3 to 4 ounces a week by the end of the first year. The standard one-formula mixture not only provides adequate nutrition when vitamin supplements are added; it also provides educational opportunities to prevent feeding problems.

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in our schedule

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The intent of these programs is to introduce the new in diagnosis and technique, to review the proven—and to integrate the two.

Make it a point to visit MEDICAL COLOR TELEVISION at this coming meeting.

Chicago Medical Society * March 4-6 * Chicago (completed)
Michigan Clinical Institute * March 19-21 * Detroit (completed)
American College of Physicians * April 28-May 2 * Atlantic City (completed)
Canadian Medical Association * June 16-18 * Halifax (completed)
American Medical Association * June 23-26 * San Francisco (completed)
Kansas City Southwest Clinical Conference * Sept. 23-25 * Kansas City, Mo.



Kentucky State Medical Association * September 23-25 * Louisville
American College of Surgeons * October 6-10 * Chicago
Southern Medical Association * November 3-6 * New Orleans
American Medical Association * December 2-5 * Minneapolis

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Pearl River, N. Y. 7/18/58

OFFICE DATE

TO: Advertising Department COPY TO:

ATT'N: J. D. Roberts

FROM: C. K. Howe, Sales

Jim --

Here's a question a number of our detail men have tossed at me. Why doesn't Lederle's advertising for ACHROMYCIN V Tetracycline play up higher, faster blood levels the way so many of our competitors do?

As you know, new laboratory studies show pretty conclusively that ACHROMYCIN V is unexcelled in this department.

How come we haven't turned on the heat in our ads?

C. K. Howe

CKH:ls

LEDERLE LABORATORIES

Lederle

A Division of AMERICAN CYANAMID COMPANY

INTEROFFICE CORRESPONDENCE

Noted CKH

Pearl River, N. Y. 7/21/58

OFFICE DATE

TO: Sales Department COPY TO:

ATT'N: C. K. Howe

FROM: J. D. Roberts

Charlie --

Sure ACHROMYCIN V Tetracycline blood levels are unsurpassed in the latest laboratory study. But actually how significant are any of these blood levels, clinically? It's really a matter of micromilligrams and fractional minutes! Let's not put Lederle in the position of giving this sort of evidence more emphasis than it deserves.

I think our job is to let doctors know that Lederle Research developed ACHROMYCIN V to give improved results under actual clinical conditions . . . to get a higher percentage of antibiotic to the tissues.

The fact that ACHROMYCIN V is the most widely prescribed broad-spectrum antibiotic ought to be pretty good evidence that physicians are consistently getting these results.

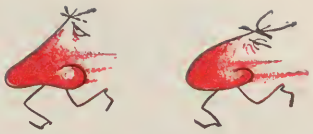
If your detail men will give doctors the complete story on antibiotics, I think ACHROMYCIN V prescriptions will continue to climb without any fancy blood level advertising.

J. D. Roberts

JDR:ep

STOP

running noses and open stuffed noses orally



Relief in minutes....lasts for hours

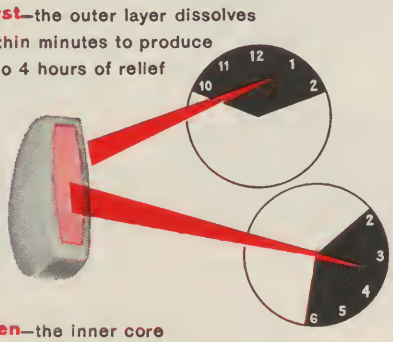
In the common cold, nasal allergies, sinusitis, and postnasal drip, one timed-release Triaminic tablet brings welcome relief of symptoms *in minutes*. Running noses stop, clogged noses open—and *stay* open for 6 to 8 hours. The patient can breathe again.

With *topical* decongestants, "unfortunately, the period of decongestion is often followed by a phase of secondary reaction during which the congestion may be equal to, if not greater than, the original condition. . . ."* The patient then must reapply the medication and the vicious cycle is repeated, resulting in local overtreatment, pathological changes in nasal mucosa, and frequently "nose drop addiction."

Triaminic does not cause secondary congestion, eliminates local overtreatment and consequent nasal pathology.

*Morrison, L. F.: Arch. Otolaryng. 59:48-53 (Jan.) 1954.

Each timed-release tablet keeps the nasal passages clear for 6 to 8 hours— provides "around-the-clock" freedom from congestion on just three tablets a day



Each timed-release TRIAMINIC *Tablet contains:*

Phenylpropanolamine hydrochloride	50 mg.
Pheniramine maleate	25 mg.
Pyrilamine maleate	25 mg.

Dosage: 1 tablet in the morning, mid-afternoon, and in the evening, if needed. To be swallowed whole to preserve the timed-release feature.

Also available: Triaminic Juvelets, timed-release, half-dosage tablets; Triaminic Syrup, for children and those adults who prefer a liquid medication.

Triaminic®

timed-release tablets

SMITH-DORSEY • a division of The Wander Company • Lincoln, Nebraska • Peterborough, Canada

From the Files of the

Committee for the Study of Maternal Mortality

Toxemia of Pregnancy

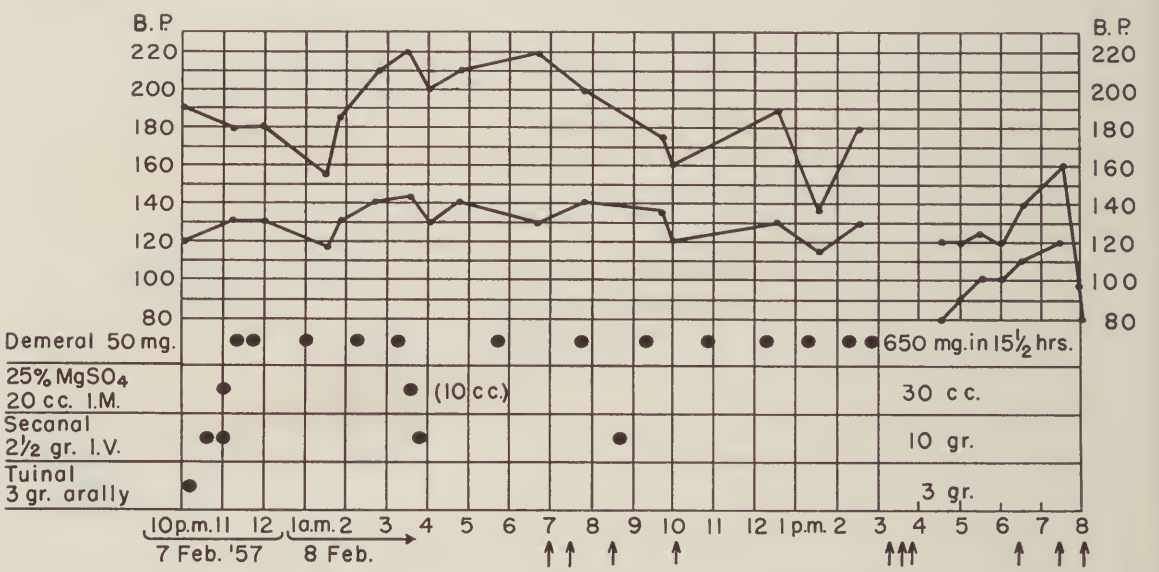
Case No. 6: A 19-year-old white primagravida consulted her physician initially August 6, 1956 in her third month of pregnancy. She weighed 101 lbs., her blood pressure was 104/70. By menses she was due to deliver February 17, 1957.

The available prenatal data were:

Date	B/P	Wgt.	Urine
8-6-56	104/70	101	Neg
9-24-56	112/70	103	Trace
10-22-56	122/70	103	Neg
11-29-56	118/68	110	Neg
1-19-57	138/90	124	Neg
1-26-57	134/104	127	Neg
2-2-57	154/100	127	Neg

On January 19, her blood pressure was elevated and she had gained 14 pounds in the six-week interval (normal desired gain 6 lb.). The amount of edema wasn't mentioned. She was given a gram of ammonium chloride 4 times a day for 4 days, plus 1/2 gram phenobarbital q.i. d. and seen again in one week at which time her blood pressure was still elevated and she had gained an additional 3 pounds. No mention was made of additional medication and she was seen again in one week. There was essentially no change in either her weight or blood pressure on February 2.

She entered labor spontaneously, February 8. The nurse's notes reveal the patient was convulsing on admission and was having some mild contractions. The remainder of her course in the hospital is shown graphically.



7 a.m. 1000 cc. 10% glucose D/W begun
7:30 a.m. 15 cc. 50% " added to above
8:30 a.m. I.V. discontinued, 300 cc. taken
10 a.m. 200 cc. urine per cath. (black)
2 p.m. Glucose 25%, 300 cc. I.V.
3:15 p.m. Memb. rupt. spont.
3:20 p.m. Delivery
Ergotrate I.V., Pitacin I.M.
3:45 p.m. Returned from Del. Rm. unconscious, no B.P.
O_2 tent begun
500 cc. whole blood started
1000 cc. B clysis D/W
Pulse 128, Resp. 28
6:30 p.m. 125 cc. black urine, per cath. Pulse 190
7:30 p.m. Coramine amp., I.M.
7:50 p.m. Coramine amp., I.M.; Adrenalin amp., I.V., Rep.
8 p.m. Expired 8 Feb. 1957

Comment

Toxemia of pregnancy is still the second leading cause of maternal deaths. This can be prevented if the patient will but avail herself of prenatal care. It is our responsibility as physicians to be alert for the *early* warning signs so the patient can be adequately treated before she reaches the convulsive state.

In this case, treatment was started at the onset of symptoms, but the committee felt it should have been more intensive. This certainly was true, when within one week both the weight gain and blood pressure increased. In management during labor the amount of sedation was felt to be quite excessive, and it was felt hypotensive therapy might have altered the course. The committee felt this was a direct obstetric cause, preventable, due to inadequate recognition and treatment of acute toxemia and eclampsia.

**This is the fifth of a series of discussions which will appear monthly on a trial basis.*

For every topical indication, a Burroughs Wellcome 'SPORIN'...



Ointment: Tubes of ⅛ oz. and ½ oz. (with applicator tip) for ophthalmic or dermatologic application.

Otic Drops: Bottles of 5 cc. with sterile dropper.



Ointment: Tubes of ½ and 1 oz. and tubes of ⅛ oz. with ophthalmic tip.

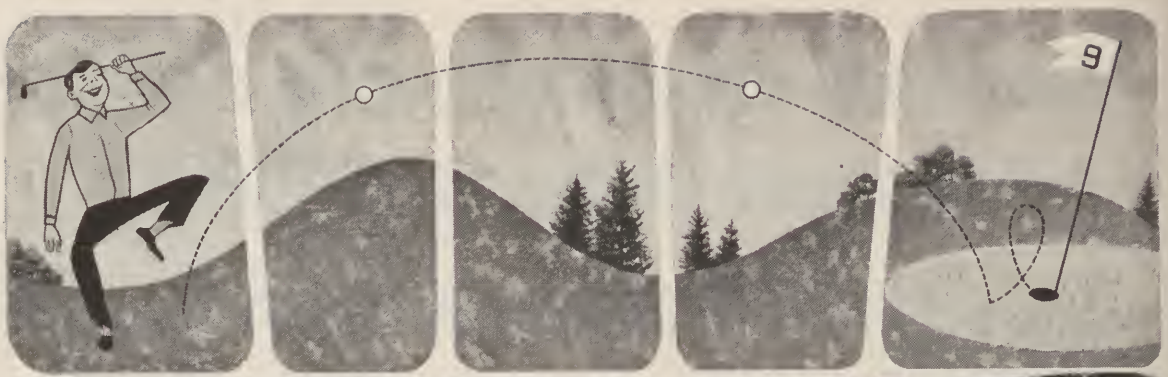
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NEW { **Lotion:** Plastic squeeze bottles of 20 cc.
NEW { **Powder:** Shaker-top bottles of 10 Gm.



Ointment: Tubes of ½ oz., 1 oz. and ⅛ oz. (ophthalmic tip).

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cough sedative / antihistamine / expectorant

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- effective for 6 hours or longer • promotes expectoration
- rarely constipates • cherry-flavored

Each teaspoonful (5 cc.) contains:

Hycodan®		
Dihydrocodeinone Bitartrate	5 mg.	6.5 mg.
(Warning: May be habit-forming)		
Homatropine Methylbromide	1.5 mg.	
Pyrilamine Maleate		12.5 mg.
Ammonium Chloride		60 mg.
Sodium Citrate		85 mg.

Supplied: as a pleasant-to-take syrup. May be habit-forming.
Federal law permits oral prescription.

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WASHINGTON NEWS DIGEST



Washington, D. C.—The civilian Medicare program is struggling through an uncomfortable period of readjustment while attempting to cut its costs by about 30 per cent.

Had the program continued the way it was operating last year, the cost this year would be an estimated $100 million. Instead, the Defense Department, on the urging of Congress, is attempting to keep the costs within the appropriated $70.2 million.

No one can estimate as yet actually what is being saved. Some services that previously were authorized in civilian hospitals and from civilian doctors have been eliminated, thus shifting these costs from the government to the service families. At the same time, many dependents who had been cared for outside the military now are required to go to the service hospitals.

If they don't like what is happening, there is not much the Medicare administrators, the doctors and the hospitals can do about it, at least not until the new Congress meets next January. Then, if situation is out of hand and there is widespread discontent among the service families, the problem could be returned to the lap of Congress.

Awkward as are the restrictions in some areas, the situation could have been much worse. The House originally proposed only $60 million for the civilian program, and ordered the Defense Department not to exceed that figure. In the Senate, Senator Knowland (R., Calif.) sponsored an amendment increasing the total to $70.2 million, and lifting the ceiling on spending. The Knowland proposal was approved.

The conference committee accepted the Senate changes, but in its report on the bill instructed the department to stay within the $70.2 million. This the department is attempting to do, but if the figure has to be exceeded for good reasons, the department would have to shift funds or ask for a supplemental appropriation and explain the need.

If the ceiling had been kept in the bill itself, the department couldn't have spent a penny more than the $60 million.

Here are the major restrictions, as outlined by the department to a meeting of Medicare contractor representatives:

- Dependents living with their sponsors to use military facilities, unless the military authorities certify that civilian care is necessary because service facilities are not available. Dependents not living with sponsors to have freedom of choice of military or civilian medicine, as now.
- In maternity cases, if the patients are living apart from sponsors, they will continue to have freedom of choice. If living with sponsors, new patients or those in the first trimester must use service facilities if available. Those in the second and third trimester, if under civilian care October 1, may continue, but if for any reason they change doctors, military facilities must be used if available.
- The new regulations also discontinue all services "not clearly specified in the law" for all dependents. The eliminated services include medical care ordinarily rendered on an outpatient basis, acute emotional disorders, and elective surgery. Emergency care may be obtained from civilian sources without prior authorization.
- Where more than one service facility is located in the area, a military clearing house will screen dependents and hospitals to insure that all service hospitals are used "to the optimum."

* * *

Congress has received a variety of advise on what to do about the hospitalization of veterans now and in the years ahead. Everybody seems to agree that 20 to 30 years from now will see a sharp increase in the number of non-service-connected disabilities among the veteran population. The question then is how many of these cases should be taken care of by the federal government.

During hearings by the House Veterans Affairs Committee, Russell B. Roth, M.D., chairman of the American Medical Association Committee on Federal Medical Services, reiterated the AMA stand that service-connected cases should receive best care possible in VA facilities and that non-service-connected illness should be the responsibility of state and local governments, if the veteran is unable to pay for his care.

Before adjourning, the House Committee introduced a bill that did little to clear up the issue of non-service-connected care. It was aimed rather at the Budget Bureau in an effort to assure that some 5,000 beds now closed because of "administrative decisions" would be placed in use—presumably for non-service-connected cases.

Notes

A group of physicians, research executives and a former director of the Budget Bureau has concluded that the nation should treble its expenditures for medical research and double its annual output of physicians, all in the next 12 years. The consultants' group to the Secretary of Health, Education and Welfare proposes that the federal government supply about half a billion dollars by 1970, with an equal amount to come from industry and philanthropy. Head of the study group was Stanhope Bayne-Jones, M.D., former dean of the Yale medical school.

* * *

Under a Senate resolution, a statue of the late Florence Rena Sabin, M.D., who was noted for her research in the lymphatic system and tuberculosis, would be placed in the Capitol's Statuary Hall, as one of Colorado's distinguished citizens. Each state is allowed two such statues.

†Trademark *Patent *2,841,971



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FOR LEG FATIGUE AND MILD VARICOSITIES

Recent clinical research demonstrated the excellent value of Supp-hose for leg fatigue, and mild disorders where heavy surgical stockings are not prescribed. The advantage of Supp-hose is that it looks just like any sheer nylon stocking, thus it overcomes one of the main objections of the patient concerned about her appearance.

SO MANY WOMEN COMPLAIN ABOUT LEG FATIGUE!

As you know, expectant mothers, housewives, working women, and women with mild varicosities all complain about discomfort of the extremities. Supp-hose eases this leg fatigue and gives gentle support all day long. Yet Supp-hose contains no rubber! Every stitch is fine nylon with a special twist that provides an elastic quality.

A VERY ECONOMICAL STOCKING!

Patented Supp-hose costs a woman just one-third what she usually pays for heavier surgical stockings. And wear tests indicate Supp-hose should give five times the wear of ordinary nylons. Supp-hose is available in proportioned sizes in beige, natural and white. At drug and department stores.

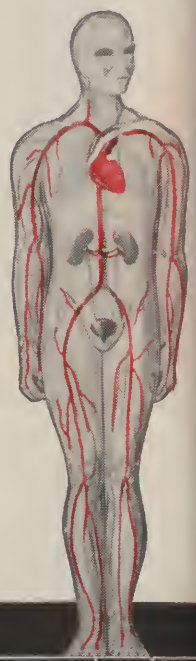
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Investigator

after investigator repor

Wilkins, R. W.: New England J. Med. 257:1026, Nov. 21, 1957.

"Chlorothiazide added to other antihypertensive drugs reduced the blood pressure in 19 of 23 hypertensive patients." "All of 11 hypertension subjects in whom splanchnicectomy had been performed had a striking blood pressure response to oral administration of chlorothiazide." ". . . it is not hypotensive in normotensive patients with congestive heart failure, in whom it is markedly diuretic; it is hypotensive in both compensated and decompensated hypertensive patients (in the former without congestive heart failure, it is not markedly diuretic, whereas in the latter in congestive heart failure, it is markedly diuretic). . . ."



Freis, E. D., Wanko, A., Wilson, I. H. and Parrish, A. E.: J.A.M.A. 166:137, Jan. 11, 1958.

"Chlorothiazide (maintenance dose, 0.5 Gm. twice daily) added to the regimen of 73 ambulatory hypertensive patients who were receiving other antihypertensive drugs as well caused an additional reduction [16%] of blood pressure." "The advantages of chlorothiazide were (1) significant antihypertensive effect in a high percentage of patients, particularly when combined with other agents, (2) absence of significant side effects or toxicity in the dosages used, (3) absence of tolerance (at least thus far), and (4) effectiveness with simple 'rule of thumb' oral dosage schedules."



In "Chlorothiazide: A New Type of Drug for the Treatment of Arterial Hypertension," Hollander, W. and Wilkins, R. W.: Boston Med. Quart. 8: 3, September, 195

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Hypertension

as simple as 1-2-3

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Dosage range 2-10 mg.
Intramuscular: 15 mg. average single dose
Dosage range 5-15 mg.
If subsequent parenteral dose is needed, one-half the original dose will usually suffice
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NEO-SYNEPHRINE HCl 5 mg...... First choice in decongestants for its mild but durable action and excellent tolerance.

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DOSE: ***Adults:*** 2 tablets three times daily.
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Bottles of 20 and 100 tablets.

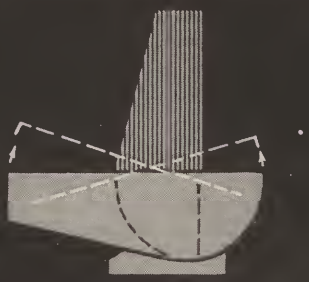
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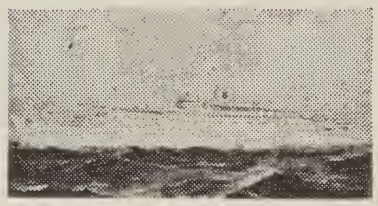
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There will be emphasis on general participation with Round-Table discussions and Clinico-Pathological Conferences.

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For information as to the deductibility for income tax purposes, of the expenses of professional postgraduate education, see Journal of American Medical Association of July 28, 1956, page 1260, also 1956 Edition Physicians Income Tax Guide, page 21; and Int. Rev. Bur. Sec. 1.162-5 of April, 1958.

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meibomitis
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The JOURNAL of the
Kentucky State Medical Association

ISSUED MONTHLY UNDER THE DIRECTION OF THE COUNCIL

VOL. 56 SEPTEMBER, 1958 NO. 9

Vagotomy For Bleeding Duodenal Ulcer*

HOWARD E. DORTON, M.D.
Lexington, Ky.

DRAGSTEDT[1] in 1943 began work which showed that at night, while at rest, the normal individual produces about a pint of normal strength gastric juice, whereas the ulcer patient produces upwards of a quart or more of strongly corrosive secretion. He found, as did Pavlov and others, that division of the vagus nerves stopped this abnormality every time. Return to normal of volume and strength of gastric juice was associated with healing of duodenal ulcer in almost every instance. This effect, Dragstedt[2] found to be permanent. Patients tested as long as seven years following vagotomy showed the same low acid values as those obtained immediately postoperatively.

The reasonableness of his findings and the simplicity of the operation persuaded us to make this clinical trial which was started late in 1946. Since that time we have performed vagotomy 204 times with only two deaths and satsfactory results in better than 90% of cases.

Drainage Procedure

Shortly after beginning our study we found as did others,[3] that after simple vagotomy, symptoms of mechanical pyloric obstruction would sometimes develop and be troublesome. This was due to temporary paresis of the stomach which is an expected result of vagotomy. Also the fixed distortion and narrowing of the area could not be expected to be altered by simple vagotomy. In order to overcome this a drainage procedure was added to the technique.

We chose pyloroplasty as the procedure we would use, if technically possible, because it allows us to confirm our diagnosis, remove the scarred area and then restore the anatomy to a more natural state. Also, the pyloroplasty seems less likely to interfere with normal digestive processes. In addition, pyloroplasty, of itself, seldom if ever will cure duodenal ulcer and so we felt we could better evaluate the pure effects of vagotomy. There are, of course, other advantages of pyloroplasty over gastroenterostomy which entered into our decision, such as ease of performance, and avoidance of the inherent complications of gastroenterostomy. Also, since pylorospasm has been considered to be one of the contributing factors in the cause of duodenal ulcer, we thought that division of the pyloric sphincter would be a simple way of eliminating this factor.

In 1950 at the first meeting of this Society in Harrodsburg, my partner, Dr. Jack Webb and I gave a preliminary report on our first 22 cases.[4] In the discussion that followed, Dr. Arnold Griswold suggested that vagotomy might well be the method of choice in the treatment of bleeding duodenal ulcer. This suggestion plus the fact that the Vagotomy Committee of the American Gastroenterological Association,[5] shortly thereafter, reported a very low incidence of recurrent hemorrhage following vagotomy, lent support to our plan to continue the method until we had proved or disproved its worth.

Since then we have treated 183 patients with duodenal ulcer. Of these, sixty patients were classified as bleeders. We have reasoned that the ulcer diathesis is the same whether the patient is a bleeder or non-bleeder. Accordingly, except for certain extra measures taken to control the bleeding point, we have treated them

*Presented before the annual meeting of the Kentucky Surgical Society, May 1957.



Figure 1

a. Vagus nerves elevated preparatory to division.

b. Vagus nerves being divided.

in the same manner. The simplicity of the operation, the low recurrence rate, and particularly the low morbidity and mortality rate have convinced us that vagotomy and pyloroplasty is the procedure of choice in any type of duodenal ulcer.

Technique

Except in the emergency group of cases, the vagotomy (fig. 1*a* and *b*) was done first to decrease chances of soiling the subphrenic space. Every effort was made to perform complete vagotomy, since as has been pointed out by Dragstedt and others, an incomplete division fails to abolish the all important cephalic phase of gastric secretion. Early in this series of cases while we were still perfecting our technique with a new procedure we encountered three cases in which we were not completely satisfied that all of the vagus fibers were severed. Subsequently all three of these patients and one other became classified as unsatisfactory results, probably due to incompleteness of the vagotomy.

The ulcer bearing area was then opened lengthways, cutting across the pylorus and if possible the ulcer was excised or excluded by wedge pyloroplasty[6] (fig. 2*a, b, c* and *d*) or sutured to control or prevent subsequent bleeding. Occasionally a pylorectomy and end-to-end anastomosis was required because of severe distortion. Usually the opening was closed transversely with a minimum of inversion to avoid obstruction (fig. 3*a, b, c* and *d*). In a few cases there was so much reaction and edema at the ulcer site, that after suture control of the ulcer, an anterior gastroenterostomy was done (fig. 4). In recent months we have been extremely pleased with the use of a gastrostomy tube by which gastric suction and duodenal feeding can be carried out during the first few postoperative days (fig. 5). The average length of hospital stay for the 60 bleeding cases was 8.7 days, which reflects the relatively low morbidity rate.



Figure 2

a. Wedge pyloroplasty—posterior superior wall duodenal ulcer being "wedged out."

b. Defect ready for closure.

c. and d. Wedge being closed.

Figure 3



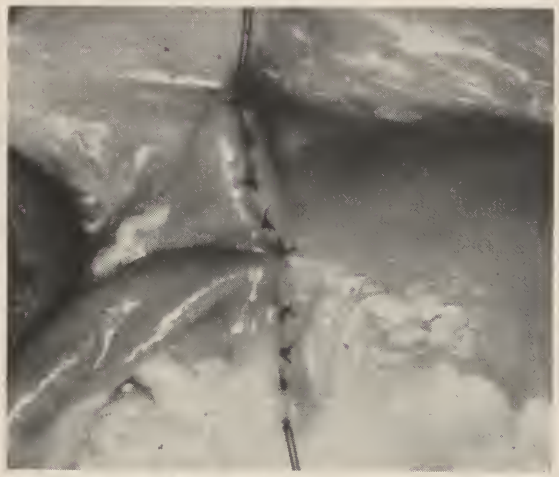
a. Anterior pyloroplasty begun by longitudinal incision through pyloric sphincter and first portion of duodenum.



b. Incision held open transversely.



c. Sutures being tied.



d. Closure completed. Omentum is tacked over this for reinforcement.

Classification of Cases

In classifying our cases we have arbitrarily placed them into four groups, depending largely upon their clinical condition and response to restorative treatment (table 1). All had lost an alarming amount of blood one or more times in the past or present.

Group I, or INTERVAL cases (eleven patients) were those who had bled severely in the recent past, had recovered completely, but required surgery for other ulcer symptoms.

Group II, or ELECTIVE cases (23 patients) were those whose bleeding had apparently stopped. Surgery was done either because of fear of another hemorrhage, or because other symptoms (pain, obstruction, malnutrition) were such as to indicate surgery anyway.

Group III, or URGENT cases (13 patients) were those in whom shock was corrected but bleeding continued slowly as evidenced by continuance of tarry stool and fall in red blood count despite repeated transfusion. (Scheduled operation)

Group IV or EMERGENCY cases (13 patients) were those in whom transfusion failed to keep up with loss and shock was neither circumvented nor corrected. (Unscheduled operation)

Statistical Analysis

Statistical analysis (table 2) of our 60 patients showed that 48 were males and 12 were females. Fifty-six were white and four were colored. The average age was 45 years, the youngest being 17 and the oldest 73. Analysis by age group placed 35 patients under 45 and 25 patients over 45 (table 3). The aver-

TABLE 1
Working Classification

Group I (11 patients)	INTERVAL Cases—complete recovery from massive hemorrhage (weeks or months).
Group II (23 patients)	ELECTIVE Cases—shock corrected, bleeding stopped.
Group III (13 patients)	URGENT Cases—shock corrected, bleeding continues.
Group IV (13 patients)	EMERGENCY Cases—shock continues despite energetic medical treatment.

TABLE 2
Statistical Information

Males-48 Females-12 White-56 Colored-4
Average age-45 Youngest-17 Oldest-73
Average duration of ulcer symptoms-11 years

age age of those patients in groups III and IV, the urgent and emergency categories, was higher than those in the Group II and Group I cases, as was expected, since older patients are more apt to continue to bleed (table 4).

The average duration of symptoms in these 60 patients was eleven years. Five patients had had previous perforation and one bled and perforated at the same time. There was a history of significant obstruction in 13 patients. Pain was variable. Eleven patients had minimal pain or none at all, the bleeding being the main feature; fourteen had pain over the duodenal region anteriorly and 35 gave a history of combined duodenal and back pain (table 5).

The number of hemorrhages each patient had is recorded in table 6. It is interesting to note that the urgent and emergent cases required surgery for their first hemorrhage in most instances.

A review of the anatomic location of the ulcer reveals that 22 cases had anterior wall ulcers and 38 had posterior wall ulcers. The most urgent cases showed a predominance of the posterior location (table 7).

Complications were relatively few. An inadvertent tear of the splenic pedicle required splenectomy in one patient (table 8). Two patients developed minor wound infections.



Figure 4
X-ray showing normally functioning anterior gastroenterostomy. Note its dependent position near the pylorus.

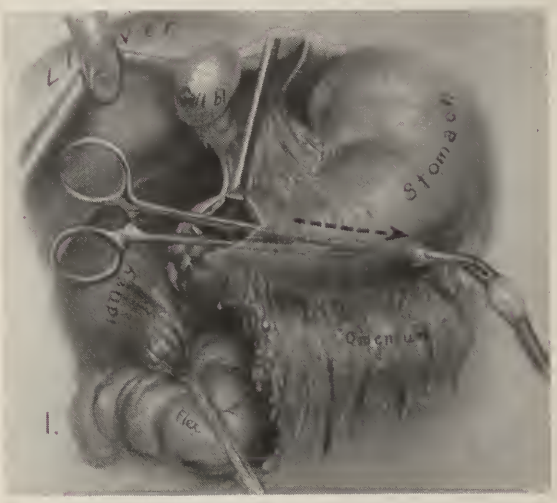


Figure 5
Gastrostomy tube in place for simultaneous gastric suction and duodenal feeding, constructed from ordinary #20-5 cc. balloon Foley catheter. The balloon is opened and this lumen is used for duodenal feedings, starting the third postoperative day. Several windows are cut in the main body of the catheter beginning four inches from the tip. This lumen is attached to constant suction for five days. The catheter is usually left in place for about two weeks as a safety measure although it is clamped off after the fifth or sixth day.

TABLE 3
Analysis by Age Groups

Age Group	15-25	26-35	36-45	46-55	56-65	66-73
No. Cases	8	5	22	12	10	3

Under 45 yrs.—35 pts. Over 45 yrs.—25 pts.

TABLE 4
Correlation of Severity with Average Age

Severity	Average Age
Group I INTERVAL	45
Group II ELECTIVE	41.5
Group III URGENT	47.6
Group IV EMERGENT	48.4

TABLE 5
Analysis of Associated Symptoms

Previous Perforation		6
Significant Obstruction		13
Pain	Minimal or absent	11
	Duodenal after meals	14
	Duodenal and back	35

TABLE 6
Correlation of Severity with Number of Episodes

	Number of Episodes of Bleeding				
	One	Two	Three	Four	Five
Group I —INTERVAL	7	2	0	2	0
Group II —ELECTIVE	14	5	2	1	1
Group III—URGENT	11	0	1	1	0
Group IV—EMERGENT	13	0	0	0	0
	45	15			

TABLE 7
Correlation of Location of Ulcer with Severity

	Anterior	A. sup.	Posterior	P. sup.	P. inf.	C.D.
Group I —INTERVAL	7	2	2	0	0	
Group II —ELECTIVE	7	1	7	6	2	
Group III—URGENT	6	1	3	3	0	
Group IV—EMERGENT	3	1	6	2	0	1
Totals	23	5	18	11	2	1
	23	37				
	Anterior	Posterior				

A. sup.=anterior-superior
P. sup.=posterior-superior
P. inf.=posterior-inferior
C.D.=common duct region

TABLE 8
Analysis of Complications

Complication	No. of Pts.
Gastric Retention (required gastroenterostomy)	1
Splenectomy (for control of bleeding splenic pedicle)	1
Wound Infection	2
Wound Hematoma	1
Incisional Hernia	1
Dysphagia (cardiospasm) temporary	2
Dumping syndrome, temporary	3

TABLE 9
Analysis of Failures

Reason for Failure	Patients
Recurrence without bleeding	2 (one resected later)
Recurrence with bleeding (within a year)	2 (both resected later)
Surgical Death Group III—Urgent 24-year-old colored male Surgery on 4th day.	1 (superior mesenteric artery thrombosis—died 5th postoperative day)

One patient developed a large wound hematoma which had to be evacuated; one patient had gastric retention requiring a gastroenterostomy during the same hospital stay; one patient who had a wound infection developed an incisional hernia. Two patients complained of temporary dysphagia, and three had transient symptoms suggestive of the dumping syndrome. The average hospital stay for all 60 patients was 8.7 days.

There were five failures in the series, including one mortality (table 9). There were two patients who developed recurrent ulcer symptoms without further bleeding. One of these has been resected and is now apparently well. Two others developed recurrence with severe bleeding within a year and required resection. They have since done well. The one mortality occurred in a 24-year-old colored male (Group III, Urgent) who had bled for four days before surgery. He died on the fifth postoperative day. Autopsy disclosed thrombosis of the superior mesenteric artery. There had been no further bleeding. Perhaps earlier surgery would have altered the outcome.

Our results are shown in table 10. Satisfactory results were obtained in 91.2%. As noted above, four were classed as poor or failure, two died of other causes and one was untraced but all of these seemed well when heard from last.

Summary From 1947-1957

Sixty patients who had had one or more episodes of massive bleeding from proven duodenal ulcer were treated by means of vagotomy and a drainage procedure. Pyloroplasty was employed 55 times and gastroenterostomy five times. There was one surgical death. There were four other failures, two of which had recurrent bleeding. Two patients who had obtained good results died of unrelated causes. One patient was untraced. Fifty-two of 57 treated and traced cases obtained satisfactory results (91.2%). The entire group has an average follow-up of 3.7 years.

TABLE 10
Results of Vagotomy and Drainage Procedure
(Pyloroplasty 55 Cases—Gastroenterostomy—5 Cases)

Result	Number of Patients	Percent
Excellent	44	91.2%
Good	8	
Poor or Failure	4	7.2%
Surgical Deaths	1	1.6%
Died—Other Causes	2	Well of ulcer disease when last seen.
Untraced	1	

Average Hospital Days	8.7 days
*Average Duration of Follow-up (1947-1957)	3.7 years

*No follow-up less than 18 months

TABLE 11
Mortality of Emergency Surgery for Massive Hemorrhage
(Chiefly Gastrectomy)

Authors	Year Reported	No. of Cases	% Mortality
Stewart and others	1952	110	11.1
Bock and others	1954	25	8.0
Thompson	1954	85	8.3
Saltzstein and others	1953	68	5.9
	....	14	28.6
Brown and others	1950	36	11.1
Hoerr	1953	18	5.6
Rosenak and others	1952	20	25.0
Finsterer	1950	174	3.4

TABLE 12
Mortality of Nonoperative Treatment of Gross Bleeding of Peptic Ulcer

Authors	Year Reported	No. of Cases	% Mortality
Costello	1953	104	6.7
Andresen	1939	120	5.0
Meulengracht	1947	1,031	2.5
Crohn and Janowitz	1951	16,172	10.7
	....	...	6.9
Crohn	1953	2,875	10.3
Lewison	1949	102	11.7

The relief expressed by the patients is impressive. Most patients volunteer the information that they enjoy food for the first time in many years. They nearly all gain weight or remain at their operative level. The incidence of recurrence is low and the recurrences nearly all have been in patients in whom there was a question of the completeness of the vagotomy.

Conclusion

The relatively higher reported mortality rates (tables 11 and 12)[7-20] when these cases are treated medically or by gastrectomy are undoubtedly due in large measure to delay in surgery. This reluctance, on the part of patient and physician alike, will only be overcome by demonstration of a more satisfactory method of treatment. In vagotomy and pyloroplasty we feel that we may have such a method.

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The Cardiac Complications of Hypertension

Allen L. Cornish, M.D.
Lexington, Ky.

Incidence

At least 60 to 75 per cent of hypertensive patients ultimately succumb to cardiac complications, especially heart failure.[1, 2, 3, 4] The disease is associated with a high incidence of coronary atherosclerosis, which has been found in 90 per cent of patients dying with hypertension.[2]

Conversely, hypertensive heart disease is the most common form of cardiac affection. In a series of more than 30,000 autopsies, about 45 per cent of the 4,700 cardiovascular deaths were due to hypertensive heart disease.[5]

Cardiac involvement, as a rule, does not develop until hypertension has been present for 12 to 15 years.[2] Eventually the strain of maintaining an elevated blood pressure, plus the effect of coronary sclerosis, takes its toll on the ventricular muscle. In all probability, the effect of coronary sclerosis predominates.[6] Later, impairment of kidney function leads to retention of salt and thus aggravates congestive heart failure.

Pathologically, the left ventricle is primarily involved. Hypertrophy and dilatation of the right ventricle await heart failure.[7]

Clinically, the hypertensive heart patient may present himself with either congestive heart failure or the picture of coronary insufficiency, or both.

Congestive heart failure develops slowly in about half of the patients and suddenly in the other half. When it is sudden, a definite precipitating cause should be searched for. Finding and correcting the precipitating cause greatly improve the prognosis.[8]

Acute Congestive Failure

The more common precipitating causes of acute congestive heart failure in patients with hypertension are as follows:

1) Infections, especially respiratory
2) Increased coronary insufficiency ("silent" infarction)
3) Paroxysmal tachycardia
4) Excessive sodium intake
5) Discontinuation of digitalis
6) Hemorrhage and anemia
7) Development of thyrotoxicosis
8) Pulmonary embolism
9) Too rapid administration of blood or other sodium-containing infusions.
10) Physical and emotional strains
11) Uncongenial climatic conditions—excessive heat and humidity or sudden cold snaps

The physician who in every case asks himself the question, "Why did this hypertensive patient suddenly go into heart failure?" will reap diagnostic and therapeutic profits for his patients.

Treatment of Congestive Failure

In further handling congestive failure due to hypertension, I have found it useful to let the degree of functional impairment help guide the treatment. This plan "lets the punishment fit the crime" and avoids over-treatment with cardiac drugs, all of which must be dangerous to be effective.

For instance, in Class I, when heart disease is present but the patient has no symptomatic limitation of activities, I merely try to lower the blood pressure, explain the precipitating causes of heart failure, encourage weight reduction, and get any necessary elective surgical procedures done. If the patient is in Class II and has symptoms on moderate exertion, prophylactic periods of rest plus a slowing down and delegation of responsibility are advisable.

In a Class III patient, who has symptoms on ordinary exertion, I use more active measures, such as careful digitalization and moderate sodium restriction. Under this classification I include patients who have a history of nocturnal paroxysmal dyspnea but who when seen during the day have normal hearts and lungs on physical examination and chest roentgenogram. These cases can be quite puzzling. However, as a rule, the diagnosis is suggested by a careful history, at times the finding of a prolonged circulation time, and electrocardiographic abnormalities. A therapeutic trial of digitalis, increased rest, and salt restriction will usually clear up the situation.

For example, a 57-year-old white housewife

*Presented at the annual Fall Clinical Conference of the Lexington Clinic on October 25-26, 1957.

was active and busy and had no pain or dyspnea on exertion. However, about once a week she awakened and had to sit up for a couple of hours because of "smothering." Her blood pressure was 140 systolic, 100 diastolic; her heart was normal on physical examination; and her lungs were clear. Circulation time was slightly prolonged (21 seconds arm to tongue). Electrocardiogram revealed minor T wave changes, and the chest film revealed slight cardiac enlargement. Increased rest and digitalis, with an occasional mercurial diuretic, relieved the nocturnal dyspnea entirely.

In frank congestive failure, I employ sodium restriction, ammonium chloride, and mercurial diuretics besides the measures just outlined. Oxygen, morphine, xanthines, and phlebotomy are used in emergencies.

To sum up, I try to fit the treatment to the individual case and am guided by the degree of failure. Thus I try to avoid using the dangerous sledge hammer when a safer tack hammer will do as well. Prolonged salt restriction, mercurials, ammonium chloride, and digitalis are all hazardous therapeutic measures and can have fatal results if improperly used.

Treatment of Hypertension and Angina

I have been impressed by some recent patients whose cardiac function has been improved by successful treatment of the underlying hypertension. Here is an example:

A 47-year-old man had severe dyspnea and anginal pain on exertion. His blood pressure was 244 systolic, 160 diastolic. With antihypersensitive measures, his dyspnea almost disappeared and his anginal pain became most infrequent. When he was last seen in October, 1956, his blood pressure was 142 systolic, 84 diastolic. Electrocardiograms showed a considerable change towards normal.

A second major manifestation of hypertensive heart disease is angina pectoris. This diagnosis should be made with great care because of its dire psychological and prognostic implications. The essential clinical feature is that the anginal pain occurs with exertion and excitement, lasts only a few minutes, and is relieved by rest and nitroglycerine. The pain is severe enough to make the patient stop whatever he is doing at the time.

The electrocardiogram is diagnostic in 95 per cent of cases; typical abnormalities are depression of the RST segments and T wave abnormalities. If these abnormalities are not present when the patient is at rest, the Master's exercise test may bring them out.

The treatment of angina should be as careful and detailed as that of congestive heart failure. Contributing factors must be searched for and treated—for example, anemia, hyperthyroidism, peptic ulcer, diaphragmatic hernia, gallbladder disease and associated heart failure.

The following three cases illustrate the importance of discovering contributing factors:

(1) An eighty-year-old white man was confined to one room of his house because any exertion beyond walking a few feet was stopped by anginal pain. He also had gallstone disease and attacks of colic. He finally consented to a cholecystectomy in March, 1956. Now he is able to walk as far as a mile without pain.

(2) A 47-year-old white man suffered pain on the slightest exertion. He also had angina decubitus to the extent that he had hardly spent a painless night in three months. His heart was enlarged but the lung fields were clear, and there was no clinical evidence of failure. However, he was hospitalized, given digitalis and mercurial diuretics and immediately lost 10 pounds. His nocturnal angina ceased, and his exercise tolerance greatly improved.

(3) A 63-year-old white man was having to take up to 12 nitroglycerine tablets a day for angina. Routine work-up disclosed an hiatus hernia in addition to hypertension and coronary insufficiency. Treatment of the hernia with diet, antispasmodics and antacids reduced the frequency of anginal attacks from 10-12 a day to 3-4 a week.

Precipitating factors must be avoided. Slow walking with rest periods is advised. Particular care about exercising on a full stomach and in cold weather is advised. Nearly every obese patient benefits from losing weight.

Of all drugs used for angina, nitroglycerine alone has stood the test of time. It is used for treating the attack and for preventing attacks as, for instance, before exercise or intercourse. Peritrate® is of questionable value. A mild sedative may help the anxious patient. The results of inducing myxedema and of cardiac surgery are still a matter of controversy, although either is perhaps worth trying in the patient with angina at rest and who is unresponsive to other measures.

Summary

The frequency and pathologic physiology of cardiac complications of hypertension have

been discussed. Diagnosis and treatment of congestive heart failure and angina pectoris secondary to hypertension have been described.

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A Pledge for Kentucky Physicians

I do solemnly swear that I will make every effort to attend the 1958 KSMA Annual Meeting in Louisville on September 23, 24, and 25—and with this pledge, I promise to take immediate action by:

1. *Circling September 23, 24, and 25 on my calendar*
2. *Making arrangements for another physician to handle my practice*
3. *Writing for hotel reservations, if needed*
4. *Notifying patients that I will be out of the office for purpose of adding to my medical "know-how"*

Recognizing that the objective of the Association's Annual Meeting is to contribute to my medical knowledge by providing a varied, interesting and valuable program of postgraduate medical education, I hereby pledge myself to take an active interest in all scientific sessions, exhibits, and in all phases of the program leading to the advancement of the KSMA and the profession of medicine.

Bronchiectasis

Porter Mayo, M.D.
Lexington, Ky.

BRONCHIECTASIS was first described by Laennec in 1819 and is one of the non-tuberculous diseases which is most often mistaken for tuberculosis because some of the local symptoms and the physical findings of the two are the same. Bronchiectasis is truly a variable condition which is caused by many unrelated and usually non-specific ctiologic agents and is characterized by dilatation of the bronchi with concomitant infection of the bronchial walls and pulmonary parenchyma. It must be considered a fairly common disease today occurring during all periods from infancy to old age. This is not too surprising when one considers the numerous causes which may lead to the development of the disease. Perry and King reviewed 400 cases of bronchiectasis largely concernod with adult material. Their findings indicated that in 69% of thc series, bronchiectasis occurred before the twentieth year of life and in 42% it started before the tenth year. Their investigations emphasized the fact, also expressed by others, that bronchiectasis in adults commonly has had its origin as a childhood disease. Any inflammatory process which can damage and weaken the structures of the bronchial wall may be responsible.

Bronchiectasis may be associated with bronchial obstruction by a foreign body, tumor, concrction, external compression or stricture. Under these circumstances it may occur in any lobe following in the distribution of the obstructed bronchus but in the vast majority of cases there is no obstruction. Some of the causes include pncumonia, influenza and bronchopneumonia associated with measles and whooping cough, pulmonary abscess and according to some authorities, chronic bronchitis secondary to para-nasal sinus infection and allergic bronchitis. Also, bronchial dilatation may be brought about by the traction of fibrous tissue which develops following pneumonia, bronchopneumonia, influenza, tuberculosis and syphilis. Perhaps the most likely explanation presupposes the occurrence of atelectasis. Presumably, during the original bout of pulmonary infection which precedes the onset of the disease, a segment or multiple segments of lung or lungs become atelectatic. The negative pressure normally applied to the bronchi during inspiration is dissipated by the cushioning effect of the air containing alveoli in an atelectatic segment, however, this intermittent negative pressure is applied more directly to the bronchial wall of the segment involved thus causing them to dilate. Undoubtedly, under most circumstances as the atelectasis disappears, the bronchi return to normal; however, this need not always be the case.

Persistently dilated bronchi are less able to rid themselves of mucous secreted by epithelium and thus tend to be obstructed. This results in recurrent atelectasis of the alveoli which they supply and further subjects them to disadvantageous physical forces. Eventually the mucous within the dilated bronchi is infected and an inflammation develops in the bronchial wall, which is progressively weakened by destruction of its muscle and elastic tissue. With persistent inflammation of the damaged bronchi the patient is constantly in danger of secondary inflammation of the surrounding pulmonary parenchyma. In the chronic phase, as exemplified by surgical material, the major ectasia usually involves the second to fourth order branches of the segmental bronchi. Thc first order branches of the segmental bronchi and the more proximal bronchi, being strongly buttressed with cartilage, do not yield readily to the destructive force.

The association of bronchiectasis with chronic disease of the nasal accessory sinuses is well known, however, it is not always clear which situation is primary. Some cases of sinusitis are certainly improved when the bronchiectasis is relieved by surgery, and vice versa.

Distribution of Bronchiectasis

Bronchiectasis tcnds to involve segments rather than lobes; the dependent segments being the only ones involved in most instances. The basal segments of the lower lobes are more commonly affected than those of the upper ones. The lingula of the left upper lobe and its counterpart, the middle lobe on the right, are frequently involved, which is quite different

from the occurrence of tuberculosis or lung abscess, the latter tending to attack the more posteriorly placed broncho-pulmonary segments. In the lower lobe the apical segment remains unchanged even though bronchiectasis involves the remaining segments of the lower lobe. The disease occurs in the lower lobes in 65-70% of the cases, in the middle lobe in about 25% and in the upper lobes in about 5-10%. Multiple segments are involved in 80%. The disease process is bilateral in some 25-35% of the cases. There is no set pattern, but the combination of bronchiectasis in both lower lobes and the lingula on the left and the middle lobe on the right is a very common one.

Clinical Features of Bronchiectasis

The most common features of the clinical syndrome consist of a persisting cough with the production of purulent sputum. The sputum is raised predominately in the early morning hours soon after the patient has awakened. Other findings include hemoptysis which some authorities quote as occurring in as high a per cent of all cases as 40-50. It may vary from just a fleck of blood to several hundred ccs. of blood, but a fatal hemorrhage is quite rare. Usually the presence of hemoptysis indicates a rather significant advance of the disease and for the most part occurs only after the disease process has been present for several years. According to the literature, the presence of hemoptysis without the expectoration of purulent sputum has been reported and this is usually referred to as "dry bronchiectasis." It has been learned, however, that when these patients are hospitalized and treated with postural drainage, the presence of true sputum of an infected nature is made apparent.

Fever associated with frequent upper respiratory and pulmonary infections is, of course, common. The physicial signs in the chest may be quite minimal and then again may be very marked depending upon the severity of the disease. The most characteristic physical finding is the presence of numerous moist rales. Other physical findings such as change in percussion note, breath sounds and voice conduction depend upon the underlying causal disease. Clubbing of the fingers is common, but may be absent even in the more severe cases. The lack of a consistent correlation between the extent of the symptoms and the extent of the disease must be appreciated. One may have minimal changes by bronchography yet experience crippling symptoms and conversely minor symptoms may be present with extensive radiographic changes.

Laboratory Data

Multiple organisms usually typical of mouth flora are revealed by sputum bacteriology. Of particular importance in cases being considered for surgery is the presence of Streptococcus hemolyticus, Klebsiella pneumoniae and pneumococci of pathogenic types.

Radiological Appearances

Of all the measures which are undertaken for the diagnosis of bronchiectasis and for the therapeutic approach, the most important single measure is that of radiographic study. The preliminary plain radiograph as well as bronchography is used. The plain film may vary anywhere from a normal appearing chest x-ray to one revealing evidence of persisting infiltrations in segmental areas and small atelectatic triangular densities. In order to define the exent as well as the type and severity of bronchial dilatation, the outlining of the bronchial tree by contrast media is essential and must be performed with utmost accuracy if the patient is to be subjected to surgical therapy on the basis of x-ray sudies. In order to obtain the best bronchograms, it is well to have the patient undergo a preliminary course of postural drainage and to sufficiently anesthetize the bronchial tree to eliminate the coughing paroxysms which will obscure the bronchographic pattern. Bronchoscopy plays a very important part in the diagnostic regimen dealing with bronchiectasis and can yield extremely valuable information relative to the possible etiology of the disease process as well as information which may help in accurate localization. Also, the uncontaminated sputum or bronchial secretions may be obtained for culture. The removal of exudate from the bronchial passages promotes better aeration and is of value in the therapeutic management.

The Treatment of Bronchiectasis

It is important to realize that bronchiectasis is a serious disease and that once a lobe or segment has become fibrotic and contracted it is irrevocably lost. The treatment is both medical and surgical and is based on the extent of symptoms. Surgery is done if symptoms are of sufficient severity, if bronchiectatic changes are proved and adequately localized by bronchographic study, if cardio-respiratory reserve is adequate and if no other severe disease is pres-

ent. Management is conservative when the disease is so slight that surgery seems unnecessary or so extensive that pulmonary resection cannot be considered. Conservative measures may be employed as a means of preparing patients for definitive surgery and in other instances as an ultimate form of treatment.

Some patients can be improved by active postural drainage, breathing exercises and the use of penicillin inhalations. Antibiotics have proved to be of considerable value in the therapeutic management. A period in the hospital under the active supervision of the physician and nurses will teach the patient the correct methods of postural drainage and of breathing. The mortality of pulmonary resection in its various forms, even including bilateral cases and the complicated cases in all age groups, has decreased steadily in the past two decades until it has now reached levels that are gratifyingly lower than those for most comparable major surgical procedures. The hospital mortality is in the neighborhood of 1 to 2% or less. It is of importance to note that the general condition of the patient and the extent of the disease are of far more significance than age. Surgical management in children as in adults is an individual problem, but if possible, the operation should be at an age when reasonable cooperation may be expected, probably between the ages of 6 and 12. It is well to remember that bronchiectasis is a dangerous disease and for the most part is associated with moderate to severe disability. There is usually a period of years of ill health. It is the opinion of most of those treating this disease that in the absence of contra-indications of a formidable nature, resection therapy is the treatment of choice as it offers the best probability of permanent relief of symptoms. Segmental resection is used to its greatest advantage in the treatment of this disease as it increases the possibilities of bilateral excision.

The perfection of this technique allows one to remove the basilar segments which are invariably involved, and to salvage the large superior dorsal segment. In the surgical management it is important to note that one should try to save all of the normal pulmonary parenchyma due to the frequent bilateral nature of the disease, however, it must be pointed out that residual bronchiectasis may very well increase the incidence of postoperative complications and produce poor results in the years to come. As mentioned previously, the best means of preventing such disaster is by the accurate localization by bronchographic studies of the various segmental bronchi. It is well known that the appearance of the lung surface and even palpation of the lung will not indicate to the surgeon the presence or the degree of the disease. Due to the frequent occurrence of bilateral involvement, a careful evaluation of exercise tolerance and pulmonary function is not only desirable but essential. After attacking the more involved side first, a re-evaluation of the patient's status is done before operating on the opposite lung. In a relatively recent analysis by Lindskog of some 215 patients with bronchiectasis; 77 did not undergo surgery and 138 had one or more pulmonary resections. Late results of therapy were studied in 71 of the patients of the former group and 129 in the latter group. 69% of the surgically treated patients were entirely well or much improved while only 12.7% of the patients not operated upon fell in this category. The improvement in ventilatory and respiratory function may be quite dramatic even after bilateral procedures. The removal of space occupying lobes or segments of little or no function or capacity, the abolition of secretions and recurrent pneumonitis, the establishment of compensatory hyper-ventilation in remaining undiseased parenchyma and an improvement in the patient's general codition are the factors which make this functional improvement possible. Resection therapy in the treatment of bronchiectasis is one of the most satisfying developments of thoracic surgery at this time.

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Ocular Manifestations Of Hypertension*

James Lee Stambaugh, M.D.
Lexington, Ky.

EXAMINATION of the optic fundus of a hypertensive patient is motivated by efforts to determine what the hypertension has done to him and what is likely to be his future course: Are the vessels leaking? Do the vessels show organic damage? Is he in or approaching a malignant phase?

To help us answer these questions, certain criteria of visible phenomena have evolved. Many of these criteria, unfortunately, are understood only by those who originally proposed them, and as a result, the pertinent literature reveals considerable confusion. This is due not only to inaccurate terminology, but to the failure to recognize the anatomic characteristics of the retinal vascular tree.

It is important to remember that true arteries have a continuous muscular coat and an internal elastic lamina, a condition existing in the eye only in the central retinal artery and possibly its branches near the optic disc. Arterioles, on the other hand, have no elastic lamina and an incomplete muscularis. Practically all the visible arterial retinal vessels are therefore not arteries, but arterioles, and consequently it is proper to refer to vascular sclerosis here only as *arteriolar*sclerosis. *Arterio*sclerosis is a general term including several entities: some types affect only large arteries, such as senile ectasia and Mönckeberg's sclerosis; elastic intimal thickening occurs in medium and small arteries; and intimal atherosclerosis affects true arteries of any size, in a spotty manner throughout the body. But none of these conditions will be reflected in the general retinal arteriolar tree. Of the three types mentioned, only atherosclerosis can be identified ophthalmoscopically; atheromata are sometimes seen in the arteries on or near the optic disc, or may be inferred in the presence of central retinal artery or vein occlusion.

Arteriolarsclerosis is an entirely different disease, closely related to hypertension, and characterized by diffuse involvement along the vessel wall. Hyalin, often with lipid, is first deposited just beneath the endothelium; then the muscularis is affected, and finally the entire thickness, to convert the arteriole into a rigid cord. These are the changes, visible in the fundi, that particularly interest and inform us.

Ophthalmoscopic Evidences of Hypertension

Two distinct aspects are concerned in the ophthalmoscopic elucidation of increased blood pressure: one is the visible changes of hypertension per se; the other, those of arteriolarsclerosis. The failure to distinguish between these two quite different phenomena is largely responsible for the confusion that has developed. Probably all of you have noticed how difficult it sometimes is for two or more observers, using the Keith-Wagener system, to agree on fundus findings. A more useful classification was proposed by Scheie[1] in 1953. It has been my experience that use of his grouping affords a high degree of repeatability and consistency among observers, because it employs signs easily recognized and understood. Actually nothing is new or radically different in Scheie's method; it is simply a more sensible regrouping of long-accepted facts. First, here are the ophthalmoscopic evidences of hypertension:

1. *Arteriolar narrowing.* This is the earliest change.

2. *Caliber irregularity.* This is superimposed on generalized attenuation, and is said to represent localized spasm.

3. *Hemorrhages.* In extreme vasospasm, capillary wall nutrition is so poor that blood escapes through the damaged walls, to become apparent in two forms:

   a. Flame or splinter hemorrhages. Here, the blood lies between and parallel to the nerve fibers in the superficial retinal layers. This type predominates in the acute phases.

   b. Round hemorrhages. These occupy the deeper retinal layers, and therefore assume a globular configuration.

4. *Exudates.* Again, these reflect local nutritional depletion effects, and assume two general forms:

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a. Soft, cotton-wool exudates. These are seen in the more recent and acute phases, representing accumulations of edema, degenerating cellular debris, phagocytes, and/or fibrin. They occupy the superficial retinal layers, and many of them are probably due to minute terminal arteriolar occlusions.[2]

b. Hard, shiny exudates. These indicate a longer duration of the process; the exudates now become inspissated, and additional lipid is deposited.

5. *Edema of the optic disc and retina.* This indicates the onset of the malignant phase. As so excellently described by Keith, Wagener, and Kernohan[3] nearly thirty years ago, the retinal picture of malignant hypertension progresses through four distinct phases. At first, there is mild hyperemia and edema of the optic disc and peripapillary retina, with a few superficial hemorrhages and soft exudates. This period lasts but briefly, and passes to a stage of edema of the entire visible fundus, with more hemorrhages and a few punctate exudates added to the increased number of soft fluffy ones. These exudative phenomena are naturally more prominent where the retinal tissue is loosest, which accounts for their accumulation in the thick perimacular nerve fiber and ganglion-cell layers, producing the macular star; and in and around the optic disc, resulting in neuroretinal edema or papilledema. After an average duration of about four months, the edema recedes from the periphery, leaving in its wake small dark spots of proliferated pigment. The hemorrhages decrease, the optic disc hyperemia begins to fade, and the punctate exudates begin to outnumber the cotton-wool ones. This phase lasts the longest, usually six to seven months. The final phase is characterized by a pale atrophic optic nerve, with pigment spots scattered through a thin retina overlying a sclerotic choroid. It is interesting that once the ocular fundus has gone through this process, it never does so again, even though the hypertensive condition may subside, to later re-enter the cycle. Apparently the tissues are altered so that they are capable of reacting but once in this characteristic manner.

These five fundamental signs, it should be remembered, are signs of hypertension only; they result from vasospasm with its consequent nutritional effects, and their severity parallels the intensity of the vasospastic element of the hypertensive process. If this situation persists, irreversible organic vascular changes occur, which furnish a means of estimating the damage due to the wear and tear of the elevated blood pressure. Thus arrives the sixth sign of hypertension: arteriolarsclerosis. The development of sclerosis depends on the severity of the hypertension, on its duration, and to a less extent, on the age of the patient. Minimal or no sclerosis even in severe hypertension suggests recent origin; on the other hand, advanced arteriolarsclerosis may develop in a mild, although long-standing, hypertensive state.

Signs of Arteriolarsclerosis

Arteriolarsclerosis is detected by the following signs:

A. *Changes in the light reflex.*

1. Widening
2. Copper-wire
3. Silver-wire

The light streak seen on the vessels is due to light reflection from the convex cylindrical surfaces of the blood column itself, plus the surrounding wall. It follows that any increase in the wall thickness will result in increased brightness and width of the light reflex; this is the first clue of beginning sclerosis. As the reflex broadens, it covers most of the visible surface of the vessel, giving the appearance of burnished copper. In the extreme form, the so-called silver-wire arteriole, hyalinization and lipid infiltration become so great that vessel wall transparency is lost; the blood column is then no longer visible, and the arteriole appears as a white cord.

B. *Arteriolar-venous crossing changes.*

1. Simple compression
2. Tapering
3. Banking
4. Deflection

The commonest crossing phenomenon is simple compression of the vein at that point. When the sclerotic process in the arteriole extends into the vein's adventitia, the venous blood column appears tapered on each side of the crossing. More marked compression results in impeded venous return, which causes distention of the vein peripheral to that point—a condition described as banking. When the arteriole shortens or lengthens, deflections

necessarily ensue; the vein then crosses as a hump, dip, or an S-shaped bend, rather than in the usual smooth oblique path.

C. *Tortuosity*. When the sclerotic arterioles increase in length as well as thickness, they must assume a more tortuous course. This tortuosity is best seen in the small branches leading to the macular area.

Grading of Changes

Using the above criteria, a simple grading of the visible retinal vascular changes can be defined, and the distinction between the purely hypertensive and the arteriolarsclerotic processes recognized. Each of these is graded from 0 to IV on the basis of severity.

Grading of Hypertension

Grade I—Arteriolar narrowing mild; earliest recognizable generalized attenuation.

Grade II—Arteriolar narrowing more pronounced plus localized caliber irregularity.

Grade III—Narrowing, irregularity, plus hemorrhages or exudates, or both.

Grade IV—Neuroretinal edema or papilledema in addition.

Grading of Arteriolarsclerosis

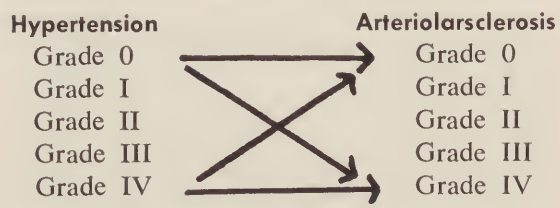
Grade I—Earliest visible increase in arteriolar light reflexes and arteriolarvenous compression.

Grade II—Those signs of Grade I more pronounced.

Grade III—Copper-wire arterioles, more a-v compression, tortuosity of small arterioles.

Grade IV—Silver-wire arterioles in addition.

It is important to recognize that any degree of sclerosis can occur with any degree of hypertension, a relationship that may be diagrammatically represented as follows:



The Worth of Evaluation

The ophthalmoscopic evaluation of the degree of arteriolarsclerosis is of particular value, for while the physician may readily determine the status of the hypertension by measurement of the blood pressure and other means, he may find it more difficult to ascertain the degree of organic vascular damage. Since this pathologic process so characteristic of the disease generally tends to occur in a diffuse manner throughout the body,[4] it is possible to infer the general arteriolar state by observing it in the eyes. It has been shown that, while exceptions occur, there is a general correlation of organic arteriolar change, as seen in histologic specimens from pectoralis muscle, and those observed ophthalmoscopically. Further, death expectancy has a direct relationship to these visible retinal changes, whether they be primarily sclerotic, or those of malignant hypertension. Most patients with malignant hypertension die within two years and roughly 90 per cent die within four years after entering this phase.

In passing, I would like to lay to rest the notion that by some ophthalmoscopic magic one can distinguish between the fundus picture of malignant hypertension and that of glomerulonephritis. Because the retinal tissues generally react in a similar fashion, exactly the same appearance is possible in either condition, although it is admittedly true that some fundi will be quite characteristic of one or the other. All the learned discussions to the contrary, the simple truth is that a diagnosis based on retinal findings alone amounts to nothing more than a shrewd guess.

Dilating the Pupils

Finally, just a word about dilating pupils. Unless there is something to suggest narrow-angle glaucoma, there should be no hesitancy in dilating the pupils if needed to get a good fundus view. For most white patients, a one per cent solution of Paredrine® instilled three times at five-minute intervals usually suffices; in Negroes and others with darkly-pigmented eyes, 2½ per cent Neosynephrine® may be required. Cycloplegics such as homatropine should be used only as a last resort, and atropine should never be used. In all cases, a one-half or one per cent solution of pilocarpine should be instilled after examination. This precaution will avoid the embarrassment of precipitating an acute glaucomatous attack.

Summation

The eye is not a spherical Delphinian oracle which gives us the answers to all the problems

relating to hypertension, but it does offer a unique opportunity for direct observation of the vessels in the living state and the changes the disease has wrought. It helps to determine not only what has happened, but what is likely to happen. Supplementing the other clinical and laboratory findings, ocular examination enables the physician to make a more accurate estimate of the possible response to medical or surgical treatment, and indeed to predict life expectancy itself. Therefore the intelligent appraisal and management of hypertension perforce includes consideration of the ocular fundus picture. I urge you to use your ophthalmoscope; I think you will be glad you did.

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Body Composition:— —Normal and Abnormal

Walter I. Hume, Jr., M.D.*
Louisville, Ky.

Normal Body Composition

THE ionic composition of two main body compartments, intracellular fluid and extracellular fluid, is well known.[1] K^+, HPO_4^- and protein$^-$ form the major part of the pattern within the cells; measurement, therefore, of these ions, both statically and in balance studies, helps tell us of intra-cellular metabolism. Na^+ and Cl^- have the same relationship to extracellular fluid and therefore may reflect extracellular changes. Simple static measurement of these ions, while often helpful, can sometimes fail to answer clinical questions, and may even confuse the picture (e.g. how to explain the usual drop in serum sodium postoperatively, in the face of the fact that the patient may be known to be taking more sodium than he's losing). What is needed is the addition of a concept of volume as applied to the compartments. Knowledge of normal volumes, and of the characteristic changes in volumes in response to certain clinical situations, coupled with knowledge of intake and output values, makes the picture somewhat more clear.

*Instructor in surgery, University of Louisville School of Medicine.

In recent years, aided in large part by the increasing availability and practicality of isotope dilution techniques, various laboratories have outlined normal body composition and have documented the changes which occur in certain disease states. The following account is drawn, almost entirely, from the published data and clinical teaching of Dr. Francis Moore and his surgical research staff at Harvard Medical School.

Table 1 includes some of the data obtained[2] for a normal adult male, and the paragraph following the table outlines the methods of measurement.

The large vessel hematocrit is the usual venous hematocrit, plasma volume (PV) is measured by the Evans Blue dye method, red cell volume (RV) by radiochromate tagging of patients' cells, blood volume (BV) by using sum of plasma and red cell volumes, whole body hematocrit matches measured red cell volume against total blood volume, total body water (TBW) is determined by deuterium (heavy water) dilution, extracellular fluid (ECF) by radiobromide dilution, total exchangeable chloride (Cl_e), sodium (Na_e) and potassium (K_e) by dilution of radioisotopes of each of these ions. The term "total

Table 1

Normal Values for a Male Aged 60 years and 70 Kg. Weight

Measurement	Absolute Value	Relative Value % Body Weight or mEq./Kg.
Weight	*70 Kg.*	——
Hematocrit, large vessel	*44%*	——
Plasma Volume	*3150 ml.*	*4.5%*
Red blood cell volume	*2100 ml.*	*3.0%*
Blood volume	*5250 ml.*	*7.5%*
Hematocrit, whole body	*40%*	——
Total body water	*39.8L*	*56.8%*
Extracellular water	*16.4L*	*23.4%*
Total exchangeable chloride	*2030 mEq.*	*29 mEq./Kg.*
Plasma chloride concentration	*105 mEq./L*	——
Carbon dioxide combining power	*27 mEq./L*	——
Total exchangeable sodium	*2870 mEq.*	*41 mEq./Kg.*
Plasma sodium concentration	*140 mEq./L*	——
Serum osmolarity	*285 mOsm./L*	——
Total exchangeable potassium	*3300 mEq.*	*47 mEq./Kg.*
Plasma potassium concentration	*4.0 mEq./L*	——

Table 2

Derived Values for a Normal Male Aged 60 Years and 70 Kg. Weight

Measurement	Absolute Value	Relative Value % Body Weight or mEq./Kg.
Body Weight	*70 Kg.*	——
Total Body Solids	*30.2 Kg.*	*43.2%*
Total Body Fat	*15.6 Kg.*	*22.3%*
Lean Tissue Mass (Solids-Fat)	*14.6 Kg.*	*20.9%*
Intracellular Water	*23.4 L.*	*33.4%*
Extracellular Potassium	*67 mEq.*	*1 mEq./Kg.*
Intracellular Potassium	*3230 mEq.*	*46 mEq./Kg.*
Average intracellular potassium concentration	*138 mEq./L*	——
Extracellular sodium	*2340 mEq.*	*33.4 mEq./Kg.*
Residual sodium	*530 mEq.*	*7.6 mEq./L*
Na_e:K_e ratio	*0.9*	——

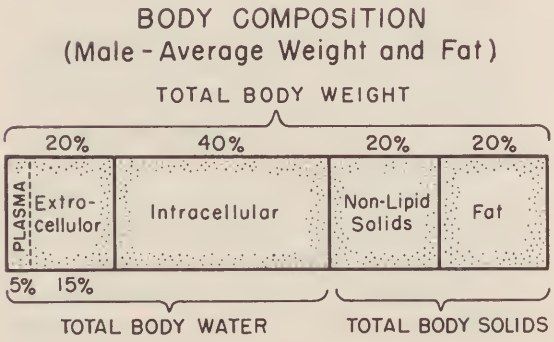
exchangeable" as applied to the ionic measurements simply infers that the dilution technique may fail to measure some of the ion present in the body; the values for chloride and potassium probably represent the approximate total body content, while that for sodium fails to measure about 50% (±800 mEq.) of the sodium deposited in bone. Serum osmolarity is a direct measurement.

Table 2 lists some of the values which may be derived from the measurements just mentioned, and the following paragraph indicates the methods of derivation.

Total body solids equals body weight minus total body water, total body fat is derived from the "Pace formula" and the total body water value ($\%\ \text{fat} = 100 - \frac{\%\ \text{water}}{0.732}$)[5], lean tissue mass equals solids minus fat, intracellular water equals total body water minus extracellular fluid, extracellular potassium equals plasma potassium concentration times volume of extracellular fluid, intracellular potassium is total exchangeable potassium minus extracellular potassium, average intracellular potassium concentration relates intracellular potassium to the figure for intracellular water. Extracellular sodium equals the plasma sodium concentration times the extracellular fluid volume; because total exchangeable sodium is greater than the value for extracellular sodium, the difference might be inferred to be intracellular sodium but there is no definite proof where this extra sodium is. Bone deposits are a prime suspect, and accordingly this extra "non-extracellular" sodium is termed "residual" sodium. The relationship of Na_e to K_e is of interest; if the ratio is 1.0 or more, severe chronic disease is usually present.

A simplified picture of the composition of an average adult male, with a usual amount of fat, is seen in Figure 1.

It must be emphasized that, of these measurements, body fat shows the greatest variation from one individual to another, the range being from about 5% of total body weight to about 50% in very obese subjects. The average adult female has about 25-30% fat. Where fat is increased, body water is decreased proportionately, and this is important, of course, in planning therapy for fluid or electrolyte disorders.



The importance of the major intracellular and extracellular cations (K^+ and Na^+ respectively) in the maintenance of body composition is obvious. The average human adult receives in his diet about 100 mEq. of each ion per day, and, of course, to maintain the balance, loses an equal amount (nearly all the sodium, and 90% of the potassium, via the urine). Knowledge of the activity of the "lean body mass" (skeletal muscles and viscera) is aided by observation of the potassium, as well

as the nitrogen, balance (the latter normally about 12 grams a day intake, with 11 grams excreted via urine and 1 gram via feces).

Alterations of Body Composition

Having sketched a pattern of normal body composition and having noted that it is not static but instead constantly changing, with resultant balance or imbalance, we now turn to a consideration of some situations tending to alter normal body composition.[3]

Table 3

Situations Tending to Alter Normal Body Composition

A. Normal recovery from trauma.
B. Starvation and chronic depletion.
C. Loss of blood volume: Shock.
D. Extrarenal loss of water and electrolyte.
E. Trauma associated with disease of the kidneys, the heart and the endocrine system.

The discussion primarily is concerned with the surgical patient but the situations mentioned may occur in illnesses of all types. A few clinical corollaries are included in the discussion of each altered state.

Normal Recovery from Trauma

Normal recovery from surgical trauma is characterized by the following:[4]

1. a transient slight elevation of temperature and pulse.
2. a transient decrease in urine excretion.
3. nitrogen loss (negative body nitrogen balance) for 3-7 days, then a period of positive balance, with little or no change in serum protein level.
4. potassium loss for 2-5 days, then a period of positive balance, with little or no change in serum potassium level.
5. a decrease in sodium excretion for 2-5 days, then a sodium diuresis. Plasma sodium level often decreases "paradoxically" during early period of positive balance.
6. a weight loss greater than would be calculated from above balance changes: this is due to fat oxidation.
7. a drop in circulating eosinophil count and an increase in urinary excretion of steroids.
8. a period of starvation and relative caloric deficiency.
9. a response proportionate in depth and duration to the magnitude of the surgical procedure.

These features of the normal response to surgery lead to the formation of certain clinical corollaries:

1. Do not treat the fever with antibiotics.
2. Do not swamp the patient with water to try to raise the urinary volume to an arbitrary norm immediately postoperatively.
3. Do not waste protein hydrolyzates, etc., trying to obliterate the usual early nitrogen loss.
4. Loss of potassium for 3 days is well tolerated and is a normal response; do not allow such a loss to continue unreplaced beyond that time.
5. Do not treat the plasma sodium concentration. Do not give sodium in the early postoperative phase as it may cause edema and hypoproteinemia. A good guide: the patient should lose at least 150 Gm. body weight per day when on parenteral maintenance.

Starvation and Chronic Depletion

Starvation and chronic depletion are characterized by the following:

1. Measurements of extracellular components (plasma volume, extracellular fluid volume, total exchangeable sodium and total exchangeable chloride) remain about normal for the patient's normal body weight and are therefore high relative to the depleted observed body weight. Note that in this case serum Na^+ is normal or (quite often) low, but total body Na^+ is very high. Do not fall into the trap of considering serum concentration as indicative of body content.
2. Measurements of working tissue (intracellular water, total exchangeable potassium and red cell volume) are low relative to depleted observed body weight, and even lower when related to normal body weight.
3. Total body water, expressed in terms of observed weight, is near normal, since extracellular volume remains the same as normal and the intracellular volume shrinks.
4. Thus, in summary, "the engine shrinks within the chassis."
5. Therefore avoid the use of large amounts of whole blood, intravenous fluids or sodium in these patients; the basic need is for energy, with which the patient can expand his lean (working) tissue.

Loss of Blood Volume: Shock

Shock is a clinical state characterized by an inadequate blood pressure. Loss of blood

volume, sudden expansion of the functioning vascular area, and cardiac failure can all initiate this syndrome. Beware of the term "irreversible shock"; it is often a screen for[2] (a) undertreatment for blood volume deficit (b) pneumo-thorax, hemopericardium or mediastinal emphysema (c) massive undrained or untreated sepsis (d) fat embolism (e) acute hyperkalemia (f) overtreatment with fluids in the face of oliguria (g) pulmonary embolism (h) neurovascular shock of central origin. Note that many of these conditions are surgically treatable, and not irreversible at all.

Shock due to blood volume loss merits special attention. The normal male blood volume is 7.5% of body weight (7.0% in females); an acute loss of 15-20% of this volume produces early hemodynamic effects. Bear in mind that the hematocrit, hemoglobin and red cell count are all normal early in acute blood loss; their values drop only after equilibration with the extracellular fluid is under way. In massive injury, transfusion of up to two times the total normal blood volume is sometimes necessary; i.e., a great deal more replacement than can be measured as loss.

A special form of blood volume loss occurs in burns and peritonitis; here the loss is almost pure plasma. This deficit can be calculated from the hematocrit, as in the following equation:

$$\text{Plasma volume deficit} = \text{Normal blood volume} - \frac{\text{Normal blood volume} \times \text{Normal hematocrit}}{\text{Observed hematocrit}} = 5 - \frac{200}{\text{Observed hematocrit}}$$

Extrarenal Losses of Water and Electrolyte

There are three major types of extrarenal losses; all are from the extracellular fluid compartment:

Upper gastrointestinal fistula or obstruction leads to
(1) calorie loss
(2) chloride loss (alkalosis)
(3) minor potassium and nitrogen loss

Lower gastrointestinal obstruction or diarrhea leads to
(1) calorie loss
(2) sodium loss (acidosis)
(3) major potassium and nitrogen loss

Burns and infectious exudates lead to
(1) major nitrogen loss
(2) variable electrolyte loss

Knowledge of the approximate electrolyte concentration of gastrointestinal fluids is vital to the management of these losses; a working acquaintance with the following values will often obviate the need for frequent blood and fluid laboratory analyses:

Electrolyte Values in Gastrointestinal Tract
Chloride—100 mEq/L throughout
Sodium —High acid — 40 mEq/L
Low acid — 80 mEq/L
Duodenum—100 mEq/L
Bile —120 mEq/L
Pancreas —160 mEq/L
Potassium—15 mEq/L (except in ileostomy diarrhea up to 70 mEq/L)

Careful measurement of the volume of all losses will allow estimation of the fluid and electrolyte need; serial weights of the patient furnish a check on efficiency of the therapy (beware weight gain in the parenterally maintained patient).

Acute potassium loss, superimposed on alkalosis due to chloride loss, coupled with the adrenal reaction due to stress, leads to "hypokalemic alkalosis"—a particular form of alkalosis resistant to sodium or ammonium chloride and requiring potassium chloride as therapy.

Two points are worth noting here:

(1) In extrarenal loss, as in other compositional changes, serum concentration often fails to paint a true picture of body content. In planning therapy, bear in mind that it is the compositional change that is to be treated, not the serum concentration.

(2) Surgical problems are surgical problems; good metabolic therapy must be accompanied, in the surgical patient, by good surgery.

Trauma with Visceral Disease

(1) Trauma associated with renal disease may produce unexpected changes in body composition; the normal response to trauma requires normal renal function. Most cases of acute renal failure occur after surgery, trauma or childbirth; a low urinary volume coupled with a low fixed specific gravity should make the physician suspicious.

(2) Surgical trauma associated with heart disease is assuming increasing importance in recent years as more cardiac diseases are being

surgically approached. The basic compositional change here is a relatively high total body sodium and high percentage of extracellular fluid in the pre-operative state (a situation similar to that of the chronically depleted patient).

(3) Trauma associated with endocrine abnormalities is not common; adrenal exhaustion is often assumed but rarely occurs. If in doubt, check the urinary sodium; excretion of over 40 mEq/liter suggests a true hypoadrenal response.

Summary

1. A basic outline of normal body composition, and of the usual compositional trends in certain commonly encountered situations, is presented.

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September 23, 24, and 25

CASE DISCUSSIONS
From The
University of Louisville Hospitals

Case of Pulmonary Heart Disease

Louisville General Hospital
Presented by Charles R. Perry, M.D., Fellow in Cardiology

Clinical History

B. S. (LGH #171631), a 52-year-old white male was admitted to the medical service of the Louisville General Hospital on 2/18/58 with a chief complaint of shortness of breath.

For 3 months prior to admission, the patient had been disabled because of dyspnea on minimal exertion. This represented an exacerbation of exertional dyspnea which had been present for 11 years. For 20 years prior to admission, he had noted cough productive of yellow sputum. Although he had smoked as many as three to five packs of cigarettes per day, he had used only one-half to one pack of cigarettes per day for the past two years.

He had noted pedal edema three months prior to admission and swelling of his abdomen was noted two months prior to admission. There was a history of vague left anterior chest pain during this same period which was not otherwise characterized. In February, 1958, he had been seen by a private physician who initiated digitalization. The patient stopped this medication however after taking 0.6 Gm. of digitalis leaf and he failed to return to his physician.

Occupational history was negative except for a 2-year-period during which he worked in a brick yard which was quite dusty.

Physical Examination

T - 98.0 P - 104 R - 26 BP - 100/70

Patient was an alert, cooperative, white male, well oriented and in moderate respiratory distress. He appeard cyanotic.

HEENT—Not remarkable.

Chest—There was an increased antero-posterior diameter. Diminished respiratory excursion and prolonged expiration was present. Hyper-resonance to percussion was noted bilaterally. Expiratory and inspiratory wheezes were heard in both lung fields. Moist rales were heard over the lower two-thirds of the left lower lung field.

Heart—The point of maximum impulse was diffuse over the fourth, fifth, and sixth intercostal spaces just lateral to the mid-clavicular line. There was regular sinus rhythm. No murmur was heard.

Abdomen—Edema of the abdominal wall was present. The liver was enlarged four fingers below the right costal margin. Ascites was questionably present. The kidneys and spleen were not palpable.

Genitalia—There was edema of the skin of the penis and scrotum.

Rectum—Slight enlargement of the prostate was noted.

Extremities—Marked edema of the lower extremities was present.

There was questionable clubbing of the fingers and toes.

Laboratory data on admission were as follows: Hb—18.55 Gm.%; HCT—57 Vols.%; WBC—9,000, polys.—78%, lymphs.—21%, eos.—1%; NPN—17 mg.%; sodium—142 mEq./L; potassium—6 mEq./L; chloride—103 mEq./L; carbon dioxide content—44.2 millimols/L; urine-sp. g.—1.017, sugar—0, albumin—3+, pH—6.0, micro—20-30 WBC/HPF; EKG—probable right ventricular hypertrophy. Portable chest film was unsatisfactory. Venous pressure was 360 mm. saline rising to 420 mm. with abdominal compression. Circulation time (decholin) was 23 seconds.

Course and Treatment

The patient was placed on bed rest and salt restriction. He was given 1.2 mg. of digitoxin in the first two days and was subsequently given 0.1 mg. of digitoxin per day. Thiomerin was given initially and oxygen intermittently.

On 2/18 and 2/19, the patient's course was uneventful and the intermittent nasal oxygen therapy was continued. On 2/20, the patient was noted to be lethargic and cyanotic. Respirations were slow and shallow. Temperature

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Arist

...in Skin Diseases: In a study of 26 patients with severe dermatoses, ARISTOCORT was proved to have potent anti-inflammatory and antipruritic properties, even at a dosage only ⅔ that of prednisone[1]... Striking affinity for skin and tremendous potency in controlling skin disease, including 50 cases of psoriasis, of which over 60% were reported as *markedly improved*[2]...absence of serious side effects specifically noted.[1,2,3]

...in Rheumatoid Arthritis: Impressive therapeutic effect in most cases of a group of 89 patients[4]... 6 mg. of ARISTOCORT corresponded in effect to 10 mg. of prednisone daily (in addition, gastric ulcer which developed during prednisone therapy in 2 cases disappeared during ARISTOCORT therapy).[5]

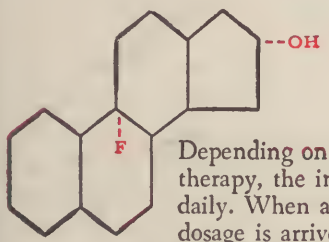
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Depending on the acuteness and severity of the disease under therapy, the initial dosage of ARISTOCORT is usually from 8 to 20 mg. daily. When acute manifestations have subsided, maintenance dosage is arrived at gradually, usually by reducing the total daily dosage 2 mg. every 3 days until the smallest dosage has been reached which will suppress symptoms.

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Lederle LEDERLE LABORATORIES DIVISION, AMERICAN CYANAMID COMPANY, PEARL RIVER, NEW YORK

was 103.8 rectally and no blood pressure could be obtained. He was started on aqueous penicillin and streptomycin and placed in a Drinker respirator. Almost immediately upon being placed in the respirator, a systolic blood pressure of 90 mm. Hg could be obtained.

On 2/21, tracheotomy was performed. The next day the patient's condition seemed unchanged but by 2/23, although still in the respirator, the patient was more alert. His CO_2 at this time was 37.5 millimols/L and marked dependent edema was still noted. The following day, on 2/24, he was taken out of the respirator for most of the day. On 2/25, he was taken out of the respirator entirely. Arterial oxygen saturation at this time was 41%. Arterial CO_2 content was 36.2 millimols/L. In the afternoon of 2/26, the patient's condition again deteriorated. He became semicomatose with shallow respirations and marked anoxia. He was again placed in the Drinker respirator.

On this occasion, he did poorly in the respirator because of failure to synchronize his respiratory movements with the movements of the machine. He furthermore was a difficult nursing problem in the respirator because of the presence of diarrhea and the tracheotomy tube.

Accordingly, the following day, on 2/27, he was taken to the anesthesia recovery room where a cuffed tracheotomy tube was inserted and a Bennett intermittent positive pressure oxygen machine adapted to the tracheotomy orifice. Therapy at this time consisted of positive pressure oxygen (approximately 14-16 cm. H_2O pressure in inspiration), isuprel 3 to 4 times daily under pressure via the Bennett valve, antibiotics, digitalis, and thiomerin administration. Through 2/28, the patient showed little improvement in his level of awareness and remained semicomatose.

On 3/1, he became more alert and was able to respond to simple commands. He continued to improve and on 3/3 was transferred back to the medical ward where the same regime was continued. On 3/4, his arterial oxygen saturation while breathing room air was 75.67% and his arterial CO_2 34.64 millimols/L.

His improvement continued and by 3/9, he was walking about the ward and on 3/28, the tracheotomy tube was removed and the patient discharged. His CO_2 at the time of discharge and for the week prior to discharge was 31 millimols/L. His edema slowly resolved with continued salt restriction, digitalis, and intermittent thiomerin. At the time of discharge, he was edema free and essentially asymptomatic on ambulatory ward activity.

Discussion

Leonard Leight, M.D.
Assistant Professor of Medicine

This patient presents the classical picture of decompensated pulmonary heart disease. The presence of severe hypoxia, hypercapnia, polycythemia, right ventricular hypertrophy, and heart failure are all part of this disease complex. Although definitive pulmonary function studies were not performed, on clinical grounds it is likely that the underlying pulmonary disease was pulmonary fibrosis and emphysema probably accompanied by pulmonary infection.

This case is of importance not only because of its successful management, but also because it vividly demonstrates the marked improvement which may occur in a case of chronic cor pulmonale. From the therapeutic aspect, the most important facet of this case and the greatest threat to life was the presence of severe anoxia as demonstrated by an arterial oxygen saturation soon after admission of only 41.0%. The therapeutic procedures used; oxygen, isuprel, antibiotics, Drinker respirator, Bennett valve, trachcotomy, were all directed towards improving the state of oxygenation of the blood. Before discussing further the rationale for these procedures, a word should be said about the hypercapnia present in this case. On admission, the patient had a venous carbon dioxide content of 44 millimols/L.

The possibility of the syndrome of carbon dioxide narcosis being precipitated by oxygen administration in patients with a high carbon dioxide content of the blood is now widely recognized. However, this complication of oxygen administration occurs only in a small percentage of patients and death from anoxia in patients with chronic pulmonary disease is much more common than is death from CO_2 narcosis. Thus, the use of oxygen in the patient under discussion was strongly indicated in view of his severe anoxia. It is probable that the initial episode of vascular collapse on 2/20/58 was due to anoxia because of inadequate oxygen administration rather than to carbon dioxide narcosis. However, oxygen should be administered to patients with CO_2 retention with great care. Patients such as the one under discussion when given oxygen should be observed as carefully as

are patients in diabetic coma in order to prevent CO_2 narcosis.

The utilization of the Drinker respirator and Bennett valve and the performance of the tracheotomy were all directed toward making the inhaled oxygen more readily available. Tracheotomy by decreasing the dead space by as much as 50% is an invaluable procedure in patients with severe anoxia. The presence of a tracheotomy also makes it much easier to keep the trachea free of secretions. The Drinker respirator while a very valuable adjunct in the treatment of patients with chronic pulmonary disease has three disadvantages. They are difficulty in nursing case, the possibility of the negative inspiratory pressure producing pulmonary edema, and the uselessness of the respirator if the patient breathes voluntarily as happened in this case the second time the patient was put in.

The Bennett valve, which is a demand valve delivering a desired concenration of oxygen under positive pressure during inspiration with unimpeded expiration tends to obviate the objections to the use of the Drinker respirator. Furthermore, the use of the Bennett valve allows bronchodilators to be administered efficiently and under pressure. It is almost a sine qua non that patients with emphysema have increased resistance to breathing. Use of broncho-dilators three to four times daily in such patients is an important part of the therapeutic armamentarium. Such broncho-dilators can almost never be efficiently administered to uncooperative anoxic patients unless given by a device such as the Bennett valve. Finally, almost all patients with pulmonary emphysema and fibrosis who enter the hospital with pulmonary and cardiac decompensation have an element of pulmonary infection and the use of antibiotics to clear up such an infection plays an important role in improving pulmonary function.

The fact that a patient such as this with such severe anoxia so as to be in shock can leave the hospital asymptomatic with sufficient improvement in his pulmonary function to increase his arterial oxygen saturation from 41.0% to 75.67% and decrease his carbon dioxide content from 44.2 millimols/L to 31.0 millimols/L, illustrates well that disability due to chronic pulmonary disease is not always irreversible.

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SPECIAL ARTICLES

A Look At Nursing

EDWARD B. MERSCH, M.D.
Covington, Ky.

ONE of the problems which confronts medicine today is the shortage of nurses. Various attempts have been made to study this shortage, but the solution is still in the distance.

There are a number of factors which play a vital part in the shortage. These must be studied and analyzed and an attempt made to equilibrate the factors.

First, there has been a tremendous increase in our population in these United States. In 1900, we had a population of 75,994,575, in 1930, a population of 122,775,046, in 1950, a population of 150,697,361. Today our population is estimated as over 170,000,000 people.

This increase in population has been proportionately reflected in the increase in the number of hospital admissions. This increase has also been influenced by the change in the practice of medicine, by the advent of specialization, the improvement in the care of the sick, and by the large number of insurance programs and a host of other reasons. In 1934, there were approximately 7 million admissions as compared to 17 million in 1949. In 1955, thirteen out of every hundred Amercians were hospitalized, for a total of 21,072,521 admissions. The average daily census for all hospitals was 1,363,024 in 1955, which means that on an average day, 8 out of every 1000 persons in the United States were hospitalized.

Distribution of the hospitals as to size (1955) reveals that 14% had fewer than 25 beds each, while 7.7% maintained 500 beds or more. 60% of the 6,956 hospitals had bed capacities of less than 100.

In 1954, there were approximately 25,000 nursing homes, with a total bed capacity of about 450,000.

According to the American Hospital Journal Aug. 1, 1956, the breakdown of patients in hospitals in 1955 was as follows: General Hospitals 37.1%, Psychiatric Hospitals 54.3%, Tuberculosis Hospitals 4.8% and all other hospitals 3.6%.

In the United States in 1955, there were about 126 practicing physicians for every 100,000 persons. The A.M.A. medical directory reported 206,432 active doctors in April 1955. There were estimated to be about 87,000 dentists active in 1955, or about 53 dentists per 100,000 population. There were approximately 270 professional nurses for every 100,000 population. There were estimated to be 401,600 professional nurses employed in 1954, and 430,000 in 1956. The breakdown of this estimate in 1956, revealed approximately 265,800 employed in hospitals and related institutions, 72,000 doing private duty, 36,000 office nurses, 27,200 in public health, 17,000 in industry, 10,400 in nursing education, and others, 1600.

In 1951, the estimated number of active nurses from age 20 to 60 or over was 334,733 and the number of inactive nurses from age 20 to 60 or over at 221,884.

Age group	Total		Active nurses		Inactive nurses	
	Number	Per Cent	Number	Per Cent	Number	Per Cent
Totals	556,617	100.0	334,733	100.0	221,884	100.0
20-29 years	189,406	34.0	120,366	36.0	69,040	31.1
30-39 years	165,295	29.7	84,338	25.2	80,957	36.5
40-49 years	107,833	19.4	67,364	20.1	40,469	18.3
50-59 years	52,254	9.4	36,322	10.9	15,932	7.2
60 years or over	23,046	4.1	13,821	4.1	9,225	4.1
Unknown	18,783	3.4	12,522	3.7	6,261	2.8

The estimated number of active and inactive nurses by marital status in 1951 revealed

Marital status	Total		Active nurses		Inactive nurses	
	Number	Per Cent	Number	Per Cent	Number	Per Cent
Totals	556,617	100.0	334,733	100.0	221,884	100.0
Single	144,741	26.0	129,649	38.7	15,092	6.8
Married	346,219	62.2	155,642	46.5	190,577	85.9
Widowed	21,395	3.9	16,244	4.9	5,151	2.3
Divorced or separated	18,462	3.3	16,066	4.8	2,396	1.1
Unknown	25,800	4.6	17,132	5.1	8,668	3.9

If we break down the Professional Nursing Personnel in All Hospitals and Schools of Nursing from 1951-1955 we find:

Type of personnel	1951	1952	1953	1954	1955
Totals	247,854	256,626	266,581	275,183	291,570
Administrative	9,844	10,166	10,557	10,106	11,130
Full-time instructors	5,960	6,259	6,655	7,125	8,071
Supervisors and assistants	22,781	22,997	23,602	23,385	23,164
Head nurses and assistants	34,740	35,839	37,689	38,757	41,981
General duty					
Full-time	111,021	112,324	116,290	120,735	124,292
Part-time	23,772	29,721	34,403	36,330	40,356
Private duty	31,807	31,013	29,300	29,813	30,661
Not classified	7,929	8,307	8,085	8,932	11,915

To explore more, we find in 1956, the Air Force Nurse Corps having 2609, the Army Nurse Corps 5979, and the Navy Nurse Corps 2100, for a total of 10,688 Professional Nurses. At the same time the Federal Government was employing approximately 22,000 civilian nursing personnel. Thus the Federal Government employed approximately 33,000 nurses in 1956, out of a total of approximately 430,000 active nurses from age 20 to over age 60.

Let us now look at the professional nurse education. The year 1955 saw the largest number of students entering professional nursing schools. There were 46,498 admissions. Also the nursing schools graduated 28,729 of their students in 1955, and of this number 2,704 students graduated in a degree program.

In 1948, 39% of the students withdrew before graduation. In 1955, this had dropped to 32% withdrawals. This means that the nursing schools are losing approximately one-third of their students before graduation.

If we look into the future, the number of high school girl graduates for 1959-60 has been estimated at 798,700. If nursing schools attract about 6 or 7 per cent of these students, as they have in the last few years, then they may expect to admit between 48,000 and 56,000 of these girls.

The trend has been toward enrollments in degree programs. In Oct., 1955, there were 17,437 degree students enrolled.

In Oct., 1955, there were 1,125 accredited or State approved schools of nursing, with an average of 102 students per school. Schools of Nursing on an average are small. One-fifth reported enrollments of less than 50 students. Forty per cent of the schools, and 29% of the students were in the 50-99 student enrollments. Twenty-two per cent of the schools and 26% of the students were in schools of 100-149 students. Almost 92% of the schools had student bodies of less than 200.

The schools, regardless of control, are largely supported by private sources. Fifty-four per cent of collegiate controlled schools, and 56% of those under hospitals and other non-collegiate control are entirely privately supported. 39.7% of the collegiate controlled schools received support wholly from public funds, while 19.3% of the hospital schools received public fund support.

Also, there appears to be a definite relationship between size of enrollment and accredita-

tion status. Programs which lack accreditation status were primarily those with 99 or fewer students.

Graduate nurse education has also increased. In the past four years, approximately 2,400 graduate nurses received academic degrees for further educational preparation in nursing.

One of the most critical shortages of professional nurses appears to be in the field of nursing education. Of the 5,663 nurse educators in a survey of the A.N.A. Research and Statistics Unit in 1956, 77% held baccalaureate or higher degrees, 26% held master's or higher degrees, and .7% doctor's degrees. Only 2.5% of collegiate faculty members held no degree, compared to 25% in hospital schools, and 59% of collegiate faculty members held master's or doctor's degrees, compared to 17% in hospital schools.

Now, let us look at the economic status of the Female Professional Nurse.

The salaries shown below are based on roughly a 40 hour week.

To compare these salaries with selected professional and technical occupations in the hospitals in the same six cities, we find: the dieticians earn an average of $75.91 per week, the medical record librarians $75.91, the medical social workers $76.55, the medical technologists $67.41, the physical therapists $74.91, and the X-ray technicians $64.91 per week of roughly 40 hours.

Now let us look at the functions and purpose of nursing organizations.

The American Nurses' Association functions as a federation of 54 nurse associations. "Its over-all purposes are to foster high standards of nurse practice and to promote the welfare of nurses to the end that all people may have better nursing care. It represents professional nurses and serves as their spokesman with allied professional and governmental groups and with

Average Weekly Earnings of Female Professional Nurses in Nongovernmental Hospitals in Six Cities, 1956

City	Type of Position				
	Directors of nurses	Supervisors of nurses	Nursing Instructors	Head nurses	General duty nurses
Baltimore, Maryland	$95.50	$71.00	.....	$65.00	$62.50
Boston, Massachusetts	99.00	73.50	$74.50	66.00	60.50
Buffalo, New York	98.00	76.00	76.50	68.50	60.00
Chicago, Illinois	115.00	86.50	87.50	78.50	72.00
Portland, Oregon	104.00	80.50	....	73.50	67.50
St. Louis, Missouri	109.50	81.00	72.00	70.50	64.00

Average Weekly Earnings of Female Professional Nurses in Governmental Hospitals in Five Cities, 1956

City	Type of Position				
	Directors of nurses	Supervisors of nurses	Nursing Instructors	Head nurses	General duty nurses
Baltimore, Maryland	$127.00	$86.00	.....	$78.50	$73.00
Boston, Massachusetts	104.50	83.00	.....	75.50	72.00
Buffalo, New York	138.00	107.00	$90.00	85.50	75.00
Chicago, Illinois	136.50	97.00	95.50	88.50	76.50
St. Louis, Missouri	118.50	85.00	86.50	81.00	71.50

the public." It likewise promotes and protects the economic and general welfare of nurses through its economic security program.

The National Student Nurses' Association functions as an independent organization of the American Nurse Association and the National League for Nursing.

The purposes of this association as stated in the constitution and by-laws, are:

(1) To aid in development and growth of the individual student by fostering good citizenship.
(2) To promote professional and social unity among the student nurses of the U.S.A.
(3) To introduce professional organizations on a national level to student nurses and to encourage participation in meetings and activities.
(4) To stimulate an interest in, and understanding of the program of the graduate professional nurse organizations of the U.S.
(5) To serve as a channel of communication between student nurse organizations and professional nurse organizations.
(6) To encourage and assist individual states in the formation of student associations.
(7) To provide a closer bond and more unified spirit among student nurses through group and national activities and through co-operation with other student nurse associations throughout the world.

There are in addition to these a host of other nursing organizations, including the international groups.

If one reads some of the currently popular books and articles on the various phases and nursing programs, one has to conclude that the Progressive or New Educationist group has entered the field of nursing education, together with some of the internationally minded socialist groups. More and more emphasis is placed on the socio-economic status rather than on nursing care for the sick patient. It would almost seem that the care of the sick is not the prime purpose of nursing. One also gets the impression that some nursing educators are laboring under the impression that the hospital is functioning for the training of the nurse rather than for the care of the sick.

We find the students' curriculum demanding more and more time in the class room, and less and less time on the wards.

There is no substitute for good bedside teaching where the nurse is in direct contact with the patient. For it is here at the bedside, that the true character of the nurse is shown. It is here that she receives her greatest satisfaction.

The bedside is the fountain of knowledge. It is here that the problems arise. It is here that the practical know-how can be demonstrated. It is here where the qualities of the nurse are brought to life. It is here that she can portray her kindness, her gentleness and her abilities. It is here that she learns the problems of life and how to cope with them. It is only here that nursing is truly nursing. It is here where the spirit of Christianity is brought to the front. And it is here where that spirit is most welcomed and received, the appreciation most heart warming.

It seems that the nursing profession has become too interested in being a profession. That is not an argument. They are trying to become teachers, at the expense of their primary purpose—the care of the sick. Too much emphasis is placed on lengthening the curriculum and degree programs. It would seem that their purpose is to create schools for 'generals' and have forgotten the girl who is interested primarily in nursing and the art of nursing.

I am not condemning degree programs. These are necessary. But degree programs should be a post-graduate course after the basic nursing course has been completed. The degree programs should be for those who intend to make nursing a full-time career, for those who want to become supervisors and teachers.

The vast majority of nurses do not remain in nursing. They follow the usual human behavior and enter married life and raise families. Ninety per cent of the students are married at graduation or within two years afterward. Another five per cent or higher are married within five years of graduation. This then leaves from 3% to 5% of unmarried nurses. This small percentage, who are really career nurses, are the ones for the degree and postgraduate programs. This is the group which should supply most of the teachers and administrative personnel.

This does not mean to imply that the study of the 'arts' is not beneficial to the nurse or to any individual. But all persons are not suited for the arts, the humanities or for teaching. Therefore, let those who are interested in these subjects, study them after or before the basic nursing

goal has been achieved. It would be just as fallacious to insist that a bricklayer study Latin. The man wants to be a bricklayer, not a Latin scholar. And if he should ever desire to study latin, etc., he can then study it at his leisure—so also with the nurse.

It would seem that a good basic course in nursing of two years, in which the student spends more time at the bedside, would attract more girls to the profession, and would result in better nursing care for the patient. It would encourage more girls to enter nursing for the prime reason of nursing—the care of the sick.

Too many of the nursing students today busy themselves with supervisory capacities. Perhaps they don't know the arts and practices of nursing. It is always astounding to see the really sick patient being cared for by a nurse's aid or practical nurse, while the professional nurse or student is busying herself with the convalescent or ambulatory patient.

Also, some of the so-called shortage of nurses might be corrected some by the elimination of some of the unnecessary chart work. It would be more profitable to record the pertinent facts about the patient, rather than the voluminous reports of trifles. Also it is a waste of personnel to have the supervisors on each station work out time schedules, etc. This should be done by the nursing office. One lay individual could easily handle the schedule for the entire hospital, and with less time and expense.

The matter of tuition should probably be discontinued, certainly in the hospital conducted nursing schools, after the first semester or first year. This would also be an attraction to a higher enrollment, and eventually would be a saving to the hospital.

Perhaps, also, it would be advantageous to the hospital and to the student to allow more liberty to the student. Students living within reasonable distances from the hospital could live at home after the first year. This would result in smaller nurses homes, or allow for increased enrollments with the present dormitories, and would also encourage more girls to enter the profession, who otherwise stay away because of enforced dormitory residence. The economic advantage of this system would also be reflected as a saving to the patient.

Finally, the nursing field of education should examine itself critically, and discover why it has such a high rate of withdrawal (32%) among its student body. Perhaps too much stress is placed on accreditation, and too little stress on local conditions.

**Source of Nurse Statistics: "Facts About Nursing," 1957 Edition, American Nurses' Association.*

EDITORIALS

Dr. Aud Led Journal To Its Most Significant Advances



IT HAS been announced that, after two years in that post, Dr. Guy Aud has relinquished the editorship of our Journal. This information is a source of regret to all who have worked under his leadership. It is during this time that the Journal has made its most significant advances and has taken a place among the very best State Medical publications. These improvements have been in no small measure due to the Editor's vision and efforts.

His staff has expressed a sincere and deep appreciation of him and a sense of disappointment that he is not to continue to lead. Regardless of how difficult or complex a problem was Dr. Aud could be counted upon to give it his most careful attention, apply to it his experience and fine philosophy, and submit the right answer. We continually admired his ability to grasp all of the facets of a situation and the substantial judgment he employed in meeting it.

The Editorship of this Journal, however, was only one event in a life crowded with service to his profession. He filled every important elective office his County and State societies could offer, culminating in the Presidency of the Kentucky State Medical Association in 1947-48, an honor held also by his distinguished father, Dr. Charles Z. Aud in 1906. In 1950-51 he was President of the American Cancer Society after having served previously on both the Kentucky and American Cancer Boards.

These are but a few of the honors he achieved, every one an indication of untiring service to his state. To enumerate them would be tedious and might prove embarrassing to him as he reads this simple tribute.

We who strive to carry on will find a trail blazed toward still higher goals. We have the example of a master devoted to a life of service. We are glad that he remains close by for counsel and guidance on paths new to us but familiar to him.

SAM A. OVERSTREET, M.D.

Shades of Semmelweiss

SEVERAL recent events combine to emphasize the present-day problems of hospital cross infections. Time Magazine, Science Newsletter and the various newspapers throughout the country have assured public awareness of the situation. The most recent Consumers' Bulletin specifically pinpoints some of the iatrogenic aspects for lay consideration.

The contributions of Semmelweiss, Lister and others made the hospital a safe and important tool for patient care. It is of more than passing interest to note that today's problems center largely around the post operative and post partum patients including, of course, newborn infants.

The problem has many aspects. Up to the present the picture has been confused by many factors. Understandably hospital administrative officials have been reluctant to admit the existence of the problem. Many physicians have been unaware of the problem or its possible ramification. The nursing personnel concerned have felt threatened by guilt feelings when the situation has arisen.

The suggestions of the Joint Committee for Hospital Accreditation and the recommendations of the American Hospital Association have brought every aspect into sharp focus.

Two factors play important roles in the development of the "resistant" Staphylococci and the occurrence of cross infections.

It has become apparent that the laudable development of numerous antimicrobial agents and the accompanying confusion of advertising claims have made the selection of the appropriate antimicrobial agent difficult, to say the least. Too frequently unnecessary antimicrobial agents are prescribed. The net result is the emergence of resistance strains of some organisms, especially in hospital environments.

Secondly, this same umbrella of supposed antimicrobial protection has given physicians an unwarranted sense of security about their patients' potential of acquiring superimposed infections. The teachings of Semmelweiss and Lister have perhaps been subjected to shortcuts by physicians and nursing personnel. This combination of events has led to the emergence of hospital cross infections with antibiotic-resistant organisms and has enhanced those cross infections from other organisms such as the viruses.

It is clear that physicians must accept the iatrogenic aspects of these hospital cross infections. They must, by example, stimulate the other hospital personnel to re-establish proper technique. Every effort must be made to select the specific antimicrobial agent for the given infection. The guise of "prophylaxis" can be misleading and the potential harm must be considered with possible benefits. Recent publications are casting greater and greater doubt about so-called antimicrobial prophylaxis against infection, except in very specific instances.

Therapeutic discrimination and the maintenance of exacting techniques are both interesting challenges that every physician has been trained to accept as rudiments of his responsibility toward each patient.

WILLIAM CURTIS ADAMS, M.D.

Opinions expressed in contributions to The Journal are those of the writers and do not necessarily reflect the views of the Kentucky State Medical Association.

Be Sure to Read

Protocol—Clinicopathological Conference

to be presented

Wednesday, September 24, 9 A. M.

at

KSMA Annual Meeting

(on opposite page)

Protocol — Clinicopathological Conference*

Columbia Auditorium **9 a.m., Wednesday, September 24**

KSMA Annual Meeting

ON June 14, 1957, a 16-year-old white farm boy was first seen because of vomiting which had been persistent for a week. He was referred with a diagnosis of possible recurrent infectious hepatitis.

There was no significant family or past medical history. The boy had always been in excellent health and had worked actively on the farm. He had been an average student.

He had first become ill in January, 1957, with a spell of vomiting lasting about one week with fever of 102°F, nausea and night sweats. The blood pressure at the time had been 108/78, pulse 76. Bile had not been present in the urine. The liver had been "enlarged." He had then recovered sufficiently to resume limited activities, and in early June had had a transient "blackout" while at a restaurant followed by nausea and vomiting which had persisted. According to the boy's mother there had been definite jaundice early in his illness.

On physical examination he appeared healthy. His weight was 138 pounds, blood pressure 130 systolic and 90 diastolic, pulse 78, and temperature 98°F. There was no apparent venous distention and no jaundice. The lungs were clear, and there was a Grade 2 systolic murmur heard over the base of the heart and neck vessels. The liver was felt five finger breadths below the right costal margin and was slightly tender. The remainder of the examination was negative.

The hemoglobin was 15.8 grams per cent, the leukocytes numbered 9,550 per cu. mm., and the differential count was normal. The Westergren sedimentation rate was 14 mm. in one hour. The Kahn test was non-reactive. Complete urinalysis was normal (S.G. 1.011). The heterophile agglutination titer was 1:7. Thymol turbidity, alkaline phosphatase, cephalin flocculation, serum transaminase (SGOT and SGPT) and c-reactive protein tests were all normal. Icterus index was 23.8 units.

There was considerable enlargement of the heart shadow on a roentgenogram of the chest. The lung fields were clear.

An electrocardiogram was reported as follows:

Rate 120 PR .12 QRS .08.
Rhythm, sinus tachycardia
Vertical heart position
Peaked P standard I, II, AVF
Inverted T, V-4, V-5, V-6 and diphasic T, II, III, and AVF.

He was admitted to a hospital for observation. The circulation time from arm to tongue using Decholin was found to be 25 seconds, and the venous pressure in an arm vein was 240 mm. One examiner observed that the heart sounds were somewhat distant and no apex impulse was felt. By chest fluoroscopy all heart chambers seemed to share in the enlargement, there was a poor cardiac impulse of the entire heart border and there was no evidence of pulmonary congestion.

There was a prompt diuresis and eight pound weight loss after mercurial diuretics, and he was dismissed with a diagnosis of congestive heart failure due to myocarditis possibly secondary to viral hepatitis.

After dismissal from the hospital, the boy was given an occasional mercurial diuretic. Although he had no symptoms, his activities were restricted to a small amount of walking. His liver became smaller after each diuresis.

After several weeks without treatment or restrictions, he developed another sudden episode of vomiting and again was found to have hepatomegaly, elevated venous pressure and slight edema of the face. Total bilirubin was 4.0 mg. per cent. He was readmitted to the hospital for further observation and treatment. On October 11, 1957, he was operated upon.

**The Committee on Scientific Assembly and Arrangements urges that this material be read before the meeting. The CPC will be moderated by George W. Pedigo, Jr., M.D., Louisville, and discussant will be Jack L. Chumley, M.D., Louisville. Pathologist will be James T. McClellan, M.D. and radiologist, H.D. Rosenbaum, M.D., both of Lexington. Among the participants will be Dwight McGoon, M.D., surgeon at the Mayo Clinic in Rochester, Minnesota, and Laurence Robbins, M.D., radiologist-in-chief at the Massachusetts General Hospital, Boston.*

ORGANIZATION SECTION

Variety to Keynote Program of '58 Annual Meeting

The 1958 Annual Meeting program promises to be one of the most outstanding in KSMA history, according to Edward B. Mersch, M.D., Covington, Association president and chairman of the Committee on Scientific Assembly and Arrangements.

A noted speaker on Americanism, 13 scientific guest speakers, two panel discussions, 65 technical exhibits, 11 scientific exhibits, 5½ hours of closed circuit color television, a CPC, and 13 specialty group meetings will combine to provide a meeting which has both value and variety, Dr. Mersch said.

Featured speaker at the President's Luncheon on Wednesday, September 24, will be Clarence Manion, well known for his writings and speeches on Americanism. Mr. Manion, who practices law in South Bend, Indiana, and is the former dean of the Notre Dame Law School, will have as his subject, "The Disease Called Despotism." This year's luncheon will be held in the Ballroom at the Brown Hotel to accommodate the capacity crowd expected to hear Mr. Manion.

Many of the guest speakers will participate in one of two panel discussions—"The Pregnant Patient" at the opening session on Tuesday at 9 a.m. and "Geriatrics and Surgery" on Thursday at 2 p.m. Panel moderators will be Frank Lock, M.D., Winston-Salem, N. C., and Arnold Griswold, M.D., Louisville.

A new addition to the program will be a Clinicopathological Conference with George W. Pedigo, Jr., M.D., as moderator and Jack L. Chumley, M.D., as discussant.

This year 13 specialty groups will meet simultaneously during the Wednesday afternoon program. The Kentucky Society of Pathologists have joined the specialty group ranks for the first time.

Of particular interest and value to physicians attending will be the 5½ hours of closed circuit color television programs originating at General Hospital. Members of the KAGP will receive 5½ hours of Category 1 Credit for viewing these programs.

Other popular features of the 1958 Annual Meeting will be the KSMGA golf tournament at the Audubon Country Club and the reunion dinner and cocktail party held by the U of L School of Medicine in conjunction with the meeting. Nine classes will be holding reunions this year and all physicians are invited to attend the cocktail party which will precede the dinner on Thursday night at the Crystal Ballroom of the Brown Hotel.

Physicians are urged to check the program flier which was mailed recently to check on the times of particular presentations in which they might be interested.

County Chairmen Named for Drive to Detect Diabetes in Ky.

More county societies than ever before—93 at the latest count—have named local chairmen and indicated willingness to participate in the Diabetes Detection Drive, November 16-22, it has been announced by Robert Hoffman, M.D., South Fort Mitchell, chairman of the Associate Committee on Diabetes. Forty-two of these have already requested clinitest strips, he said.

All component societies which have not already done so are asked to name a diabetes committee to help implement this eighth annual drive conducted by the KSMA in cooperation with the American Diabetes Association.

Greater physician participation in the giving of free urine sugar tests is the goal of this year's drive, according to Doctor Hoffman. He announced that last year 137 new diabetics were discovered and 52,500 free tests made.

Working with Doctor Hoffman to direct the Diabetes Week drive on the state level are members of the Associate Committee on Diabetes: Herald K. Bailey, M.D., Ashland; George P. Carter, M.D., Louisa; Marcus A. Coyle, M.D., Springfield; Thomas J. Crume, M.D., Owensboro; Albert H. Joslin, M.D., Beaver Dam; Franklin B. Moosnick, M.D., Lexington; Stanley T. Simmons, M.D., Louisville; Arthur T. Hurst, M.D., Louisville; and Esten S. Kimbel, M.D., Frankfort.

M.D. from Africa to Attend Meeting

Willem P. Steenkamp, Jr., M.D., will travel all the way from his home in Capetown, Africa, to attend the KSMA Annual Meeting in Louisville on September 23, 24, and 25.

Doctor Steenkamp and his father (now deceased) both graduated from the University of Louisville School of Medicine in 1928. He hopes to see some of his former classmates at the meeting and at the reunion dinner held in conjunction with the meeting. While in Louisville, Doctor Steenkamp will be staying either with the Sidney Kornhausers or the O. O. Millers.

Guy Aud, M.D., Resigns as KSMA Journal Editor, July 31, Had Directed Publication's Progress Since Appointment in 1956

On July 31, Guy Aud, M.D., editor of the Journal of the KSMA for the past two years, submitted the following letter of resignation to the Council:

Dear Doctor O'Nan:

It is with sincere regret that I hereby submit my resignation as Editor of the Journal of the Kentucky State Medical Association, effective at the earliest convenience of the Council. I am sure you are aware of the acute illness I suffered last September, which has caused my retirement from the practice of surgery.

The time I have served as Editor of the Journal has been most enjoyable and rewarding to me. It has afforded me the opportunity of working closely with many of the members, officers and the Council of the Association. This is particularly true of the Headquarters and the entire editorial staff to whom I am so deeply indebted. I hope I will not seem presumptuous in calling to your attention a few of the many changes and additions to the Journal during the past two years.

The most striking change was perhaps the adoption of a new and colorful cover and a completely new format. The addition of new and attractive departments and sections and the liberal use of color throughout the Journal have caused much favorable comment. Change in the type has made for easier reading and a brighter and more attractive Journal. Advertising shows an increase of approximately one-third over the first one-half of last year. For some time, the Journal has been more than self sustaining.

Realizing that the dissemination of scientific knowledge among the medical profession of Kentucky is the chief reason for publishing the Journal, the entire editorial staff has worked steadily to improve the standards of the scientific and editorial material. The results are apparent.

I would like to take this opportunity of thanking everyone who has contributed to the success of our efforts. To the Headquarters staff under the guidance of our managing editor, to the entire editorial staff, the Advisory Committee to the Editor, and to the Secretary, belong whatever credit might be due for the improvements that have been made. Let us hope that this is only the beginning in making ours one of the outstanding State Medical Journals.

Again thanking you and the Council for your unfailing support,

Yours very truly,
Guy Aud, M.D., Editor

The Council authorized the following letter of reply:

Dear Doctor Aud:

Your letter of resignation as Editor of the Journal of the KSMA was presented at the July 31 meeting of the Council of KSMA which met in Louisville at the Brown Hotel.

It was with the greatest reluctance that the Council accepted your resignation. It has asked me to transmit to you its deepest appreciation for the splendid contribution that you made to the Journal as Chairman of the Advisory Committee to the Editor, and as Editor of the Journal since September, 1956.

The view was freely expressed that the Journal had made much progress in recent years, and because of your interest and efforts and effective service you had more to do with that progress than any other man.

We join the Council in hoping that you will continue to maintain your interest in our Journal which owes so much to you.

Our best wishes,

Sincerely,
Walter L. O'Nan, M.D.
Chairman of the Council of KSMA

After authorizing this letter, the Council considered the matter of selecting a new editor. By unanimous vote it elected Sam. A. Overstreet, M.D., Louisville, as Editor, and George W. Pedigo, Jr., M.D., Louisville, as Associate Editor.

Eleven Scientific Exhibits Set For '58 Annual Meeting

This year eleven scientific exhibits will provide a variety of scientific and medical knowledge to physicians attending the 1958 Annual Meeting, according to an announcement from Everett L. Pirkey, M.D., Louisville, chairman of the Committee on Scientific Exhibits.

The exhibits and exhibitors are:

"ORF in Kentucky," Ullin W. Leavell, Jr., M.D., Lexington

"Unusual Lesions and Treatment of Diseases of the Colon and Its Appendages," G. Y. Graves, M.D., and Dixon McCloy, M.D., Bowling Green

"Simple Manual Dermatone," John T. Bate, M.D., Louisville

"Chronic Cicatrizing Regional Enteritis," Benjamin B. Jackson, M.D., Louisville

"Nutritional Iron Deficiency of Infancy," William Curtis Adams, M.D., Thomas D. Stevenson, M.D., Louisville

"Opportunities for Training in Anesthesia," Eugene H. Conner, M.D., Louisville

"Safe Surgical Exposure of the Facial Nerve," Stephen P. Hogg, M.D., Cincinnati, and Robert C. Kratz, M.D., Newport

"Rheoscopic Studies of Expression and Motion," Erwin W. Straus, M.D., Lexington

"Coal Workers's Pneumoconiosis," William H. Anderson, M.D., Harlan

"Accidental Poisoning in Childhood," William Curtis Adams, M.D., Louisville

"Tuberculosis in Children," William Curtis Adams, M.D., Louisville

Symposium on Diabetes Planned for October Issue

The entire scientific section of the October Journal of the KSMA will be devoted to a Symposium on Diabetes, which has been prepared under the direction of Symposium Editor Wallace Herrell, M.D., Lexington Clinic.

Decision to include a yearly symposium in the Journal was made at a meeting of the Advisory Committee to the Editor earlier this year. The committee felt that there would be considerable interest and value in an issue which covered all phases of a particular disease. Doctor Herrell, who was formerly associated with the Mayo Clinic in Rochester, Minnesota, was selected as Symposium Editor.

The subject Diabetes was chosen at a special meeting of the editor and various associate editors. The group felt that Diabetes was an appropriate subject since it would be of interest to most Kentucky physicians and would be of particular interest because of the forthcoming Diabetes Detection Drive in November.

Following is a list of symposium participants and their subjects.

"Diabetic Detection Drive: The Results and Their Implications," Robert J. Hoffman, South Fort Mitchell.

"The Diabetic's Diet and His Income," John H. Willard, M.D., Ann Hains, and Eleanor Eeeleston, Harlan.

"Oral Hypoglycemic Agents: Their Uses and Limitations," Warren H. Diessner, M.D., Middlesboro.

"The Diabetic Triopathy," John B. Selby, M.D., and James L. Stambaugh, M.D., Lexington.

"The Management of Diabetic Acidosis," Beverly T. Towery, M.D., Louisville.

"Diabetes and Pregnancy," John S. Llewellyn, M.D., Lousville.

"The Treatment of Diabetic Patients with Surgical Problems," John S. Sprague, M.D., Lexington.

KAGP to Hold PG Seminar, Oct. 9 in Pikeville

Names of two of the four principle scientific speakers at the Kentucky Academy of General Practice's Big Sandy Postgraduate Seminar in Pikeville on Thursday, October 9, have been announced by Ralph Thursday, October 9, have been announced by Charles Bryant, M.D., Louisville, President of the KAGP.

Featured on the program will be Harry C. Shirkey, M.D., of the pediatrics department of the University of Cincinnati, and Theodore T. Eberhard, M.D., who is affiliated with St. Joseph Mercy Hospital, Ann Arbor, Michigan, and associate professor of radiology at the University of Michigan. Doctor Shirkey's subject will probably deal with poisoning in children and Doctor Eberhard will speak on some phase of cancer.

Two other out-of-state speakers will also participate in the meeting. At press time, they had not been announced. The seminar is scheduled to start with registration at 2 p.m.

Ralph W. Allen, M.D., Pikeville, is chairman.

Postgraduate Seminar Set Oct. 16 At Madisonville TB Hospital

Four scientific papers are scheduled for presentation at the Postgraduate Seminar to be held October 16 at the District One State Tuberculosis Hospital, Madisonville, according to the tentative program announced by A B. Dickey, M.D., hospital director.

The seminar is cosponsored by the Kentucky State Medical Association and the Kentucky Academy of General Practice for the First, Second and Third KSMA Councilor Districts.

The meeting will open at 2:30 p.m. Central Standard Time with registration and guided tours of the hospital. This will be followed at 3:30 by a three-hour scientific program.

Topics and speakers will be: "Fungus Infection in Western Kentucky," by Michael L. Furcolow, M.D., medical director of the Communicable Disease Center, Kansas City Field Station, Public Health Service, Kansas City, Kan.; "Progress in Medical Center Development," by William R. Willard, M.D., vice-president of the University of Kentucky Medical Center, Lexington, and "On the Passing and Holding of One's Water," by F. F. Ferguson, M.D., urologist, Madisonville.

The evening program, following dinner at 6:30, will include presentation of a scientific paper, "Antimicrobial Therapy in Pediatrics," by Alex J. Steigman, M.D., chairman of department and professor of pediatrics at the University of Louisville.

This program has been accepted by the American Academy of General Practice for Category I credit.

Civilian Medicare Restricted By Defense Department

When Congress passed the appropriation bill for the Defense Department, it specifically directed the Department to curtail expenses under the Medicare program.

The following procedures, developed as a result of the Congressional mandate, are designed to channel more dependents of military personnel to service hospitals for medical care:

1. Dependents living with sponsors to use military facilities, unless military facilities unavailable and dependents' cards so certified.
2. Freedom of choice if not living with sponsors.
3. Civilian emergency care continues.
4. Freedom of choice for maternity patients living apart from sponsors.
5. For maternity patients living with sponsors,

following applies: New and first trimester patients, as of October 1, must use military facilities in absence of certification military facilities not available. Second and third trimester patients, if under civilian care October 1, may continue, but if a change of physicians is made the patient must use military facilities in the absence of certification military facilities unavailable.

6. All services "not clearly specified in law" discontinued in civilian facilities for patients living with or apart from sponsors. These discontinued services include non-hospital injuries, termination visits prior to hospitalization, tests before and after hospitalization, well-baby visits, nervous and mental diseases and elective surgery.

7. In areas having more than one military facility, clearning houses will assure optimum use of all service hospitals.

Fall Clinical Conference Planned in Lexington, October 22-23

The third annual Fall Clinical Conference held under the auspices of the Lexington Clinic is scheduled for Wednesday, October 22 and Thursday, October 23 at the new clinic building in Lexington.

A "Symposium on Infectious Diseases," moderated by Wallace E. Herrell, M.D., will be featured on the Wednesday session from 2 to 5 p.m. The symposium participants and their subjects will include: N. T. Macfarlane, M.D., "Management of Tetanus"; P. H. Jones, M.D., "Treatment of Meningitis"; R. M., French, M.D., "Treatment of Bacterial Endocarditis"; and J. D. Ruff, M.D., "Diagnosis and Treatment of Infectious Mononucleosis."

Following intermission on Wednesday the following speakers will give presentations: with A. L. Cornish, M.D., as moderator, J. A. Harris, M.D., "Transurethral Resection of the Prostate—A Review of 100 Consecutive Cases"; J. B. Selby, M.D., "Use of the Artificial Kidney"; J. L. Stambaugh, "The Urgent Eye"; and T. R. Miller, M.D., "Whiplash Injuries."

The Thursday session will start with a "Symposium on Thyroid Disease" moderated by C. H. Fortune, M.D. Participants will be: J. P. Andrews, M.D., "Physiology and Pathology of the Thyroid Gland"; K. D. McGinnis, M.D., "Radioactive Iodine in Diagnosis and Treatment of Thyroid Disease"; A. L. Cornish, M.D., "Medical Treatment of Graves Disease"; Eugene Todd, M.D., "Thyroid Adenoma, Benign and Malignant"; J. B. Selby, M.D., "Diagnosis and Treatment of Thyroiditis,"; R. M. French, M.D., "Cardiac Complications of Thyroid Disease"; and W. P. Wharton, M.D., "Hypothyroidism—Diagnosis and Treatment.

From 2 to 5 p.m. on Thursday, F. M. Massie, M.D., will moderate a "Symposium on Gastrointestinal Diseases." Physicians participating will be D. H. Johnston, M.D., "Aspects of Gastroscopy"; J. B. Holloway, M.D., "Diaphragmatic Hernia"; J. T. McClellan, M.D., and W. E. Herrell, M.D., "Staphylococcal Enterocolitis"; and R. B. Simons, M.D., "Parasitic Diseases of the Intestinal Tract"; W. L. Cooper, M.D., "Polyps of the Colon"; and Eugene Todd, M.D., "Intestinal Obstruction."

Discussion periods will follow each symposium presentation.

Committee Thanks Exhibitors For '58 Meeting Support

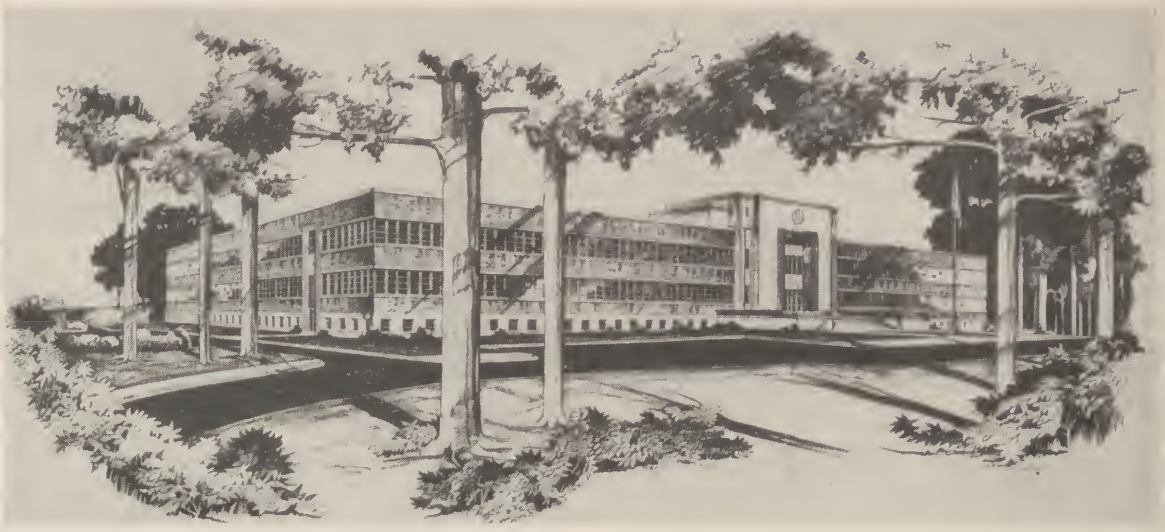
The very latest in pharmaceuticals, equipment, literature and services will be displayed by the 65 technical exhibitors who have purchased space in the technical exhibit hall for the 1958 Annual Meeting, September 23, 24 and 25.

"It would appear that our members could go few places where they could get more practical knowledge in such a short time than in our technical exhibit hall," said Jesse T. Funk, M.D., Bowling Green, chairman of the Committee on Technical Exhibits.

"On behalf of our committee and the official family of the KSMA we want to express our deep appreciation to the companies who are supporting our Annual Meeting. All who attend are urged to visit each booth some time during the meeting."

The 1958 exhibitors are:

Abbott Laboratories
A. S. Aloe Company
Ames Company, Inc.
Arnar-Stone Laboratories, Inc.
Ayerst Laboratories
Baker Laboratories, Inc.
Blue Cross Hospital Plan, Inc.
Burroughs Wellcome & Company
Burton, Parsons & Company
Carroll Dunham Smith Pharmacal Company
The Central Pharmacal Company
Ciba Pharmaceutical Products, Inc.
The Coca-Cola Company
Crocker-Fels Company
Dick X-Ray Company
Doho Chemical Corporation
Eaton Laboratories
C. B. Fleet Company, Inc.
W. D. Gatchel & Sons
Geigy Pharmaceuticals
General Electric Company
Guild of Prescription Opticians of Kentucky
John Hancock Insurance Company
Hoffmann-LaRoche, Inc.
Kay Surgical, Inc.
Lederle Laboratories
Eli Lilly and Company
J. B. Lippincott Company
Lloyd Brothers, Inc.
Logan Company, Sealy Division
McNeil Laboratories, Inc.
J. A. Majors Company
Malkin Instrument Company
Maltbie Laboratories
Mead Johnson & Company
The Medical Protective Company
Merck Sharp & Dohme
The William S. Merrell Company



Ground breaking ceremonies for the new State Department of Health Building in Frankfort were held, August 25. This is the architect's drawing of the building which will be erected on U. S. Highway 60.

Miller Surgical Company
The C. V. Mosby Company
Nordmark Pharmaceutical Laboratories
Ortho Pharmaceutical Corporation
Parke, Davis and Company
Pfizer Laboratories
R. J. Reynolds Tobacco Company
A. H. Robins Company, Inc.
J. B. Roerig & Company
William H. Rorer, Inc.
Ross Laboratories
Sandoz Pharmaceuticals
Schering Corporation
Julius Schmid, Inc.
G. D. Searle & Company
Smith, Kline and French Laboratories
E. R. Squibb and Sons
Theodore Tafel
United States Tobacco Company
The Upjohn Company
U. S. Vitamin Corporation
Vanpelt and Brown, Inc.
Wallace Laboratories
Warner Chilcott Laboratories
Winthrop Laboratories
The Max Wocher & Son Company
Zimmer Manufacturing Company

Newsletter Quotes Dr. Hancock

"The Price of Freedom," a special article by J. Duffy Hancock, M.D., Louisville, which appeared in the May, 1958 issue of the Journal of the KSMA, was quoted in the August number of the Blue Shield Medical Care Plans Newsletter.

Doctor Hancock, president of Kentucky's Blue Shield Plan—Kentucky Physicians Mutual, urged physicians to make their leadership felt in combating all attempts to subject medicine to governmental domination.

Dr. Teague Outlines the Plans For New Health Building

Plans are well under way for the construction of a new State Department of Health Building in Frankfort, which is scheduled to be ready for occupancy in the fall of 1959, according to Russell E. Teague, M.D., Commissioner of Health.

The three-story structure, estimated to cost $4,000,000 when equipped, will be located on U. S. Highway 60 on the east side of the state capital. The site is a hilltop near the Kentucky Training Home.

Functional in design, the building will house the State Board of Health, the State Department of Health, the Department of Mental Health, the Tuberculosis Commission, the Commission on Alcoholism and other allied licensure agencies, Doctor Teague said.

In addition to general office and laboratory space, there will be an auditorium seating 800 and a cafeteria, and parking facilities for 400 cars will be provided. The building is designed for a total of 148,000 square feet of floor space.

Color TV Participants Prepare for Months Before Meeting

Since the first of the year, members of the University of Louisville Medical School faculty have been holding meetings, discussions, rehearsals, and dress rehearsals in preparation for the color television programs which will be featured at the KSMA Annual Meeting.

The color television presentations—which are being directed by Beverly T. Towery, M.D., Louisville, chairman of the special committee on color television—have been accepted by the Academy of General Practice for 5½ hours of Category 1 credit.

Covering a variety of subjects, including an actual caesarian section, the management of respiratory difficulties, early detection of cervical cancer, frontal

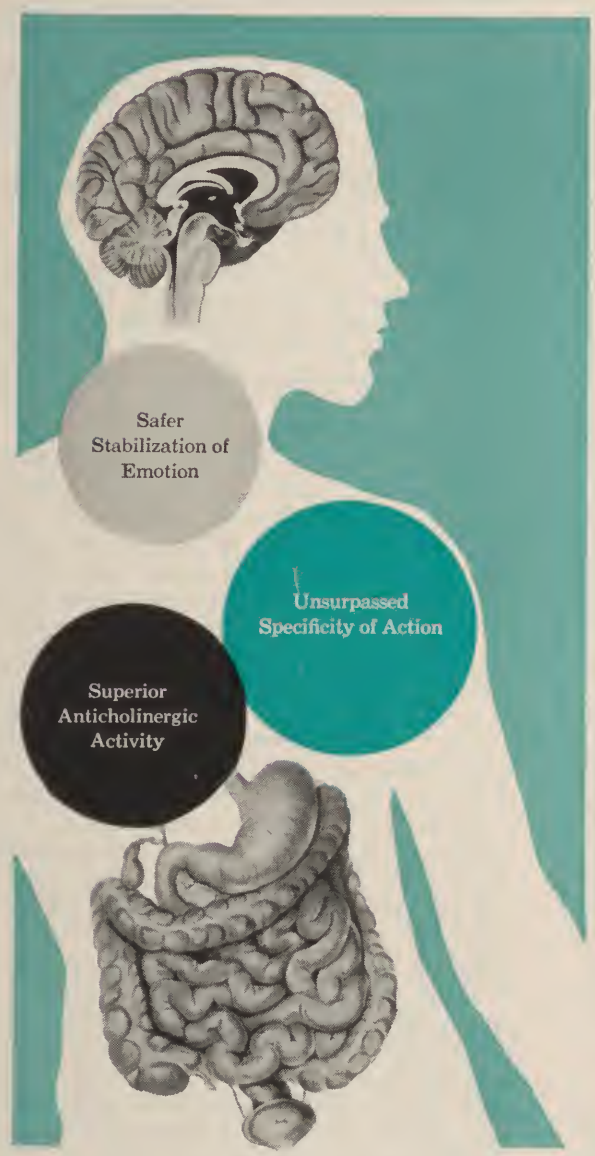
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lobotomy, hyperthyroidism, office biopsy, and the malignant carcinoid syndrome, the programs will be relayed to the Columbia Auditorium from the General Hospital through the television facilities of Smith, Kline and French.

The color television programs have been interspersed throughout the three days of the meeting to add variety to the scientific program. Color TV programs are scheduled from 3:30 p.m. to 5 p.m. on the opening day of the meeting, September 23; from 10:30 to 11:40 a.m. on Wednesday, September 24; and from 10:30 to 12 noon and 3:30 to 5 p.m. on Thursday, September 25.

STUDENT AMA

Physician-Student Advisor Program

"What's the point of all this?" What medical student has not asked this question at some time during his academic training—especially during the preclinical years. It is an understandable query. A year or two before, he was a senior in college and as he graduated he saw his friends go forth into business and industry, prepared, as it were, to meet a promising future in the world of the forty-hour week. He enjoyed some measure of prominence among his schoolmates because he had sweated out some of the roughest courses that his college had to offer—and at the same time he had made better than average grades.

Then suddenly he found himself a freshman again in a school where work began on the *first* day of classes, where a hitherto undreamed-of mass of detailed information had to be committed to memory, where his dissection was never complete by week's end, and where the laboratory work was more difficult than the lecture course. He was branded by the smell of phenol, and, except for the one or two professors who addressed him as "Doctor," the days of the white coat seemed very far off and farther still was any idea of the practice of medicine.

The unfortunate thing here is not that the work is difficult nor that the hours are long, it is that all too often the student loses sight of the ultimate goal—the *practice* of medicine. It is for this reason that beginning with this year's freshman class at U. of L. a new facet of medical education is being explored. The Jefferson County Medical Association in conjunction with the U. of L. Chapter of SAMA have begun a program which, for want of a better name, is being called The Physician-Student Advisor Program. The mechanics of the plan are simple; each student has received a questionnaire designed to gather information concerning his habits and tastes.

The Jefferson County Medical Society has sent a similar form to each of its members and those who wish to participate in the program have filled out the blanks and returned the form to the Society's office. On the basis of the personal characteristics indicated in these questionnaires, each student will be matched with a physician of similar background and temperament. When the student enters school in the fall he will be given the name of his advisor and the "rules of the game"—he is not to appeal to the physician for financial help nor may he expect the advisor to intercede for him in the matter of his grades at school. Outside of these two limitations there are no bounds on the relationship between the physician and student, and it is hoped that by mutual effort many strong friendships will develop.

We feel that such a program, although it cannot guarantee a student's proficiency in medicine, can help him make the adjustment to medical school life, and further, the life he may expect as a practicing physician. He will gain insight into the obligations of his chosen profession not taught in schools. He will have a "home base" in a new environment. He will be at least provisionally accepted in that company of men whom he so desires to emulate. He will have an accurate source of answers to his many questions concerning medicine—among them, "What's the point of all this?"

W. Neville Caudill, President
U. of L. Chapter, Student AMA

Rheumatic Fever Survey Answered by 641 M.D.'s

Realizing the need for incidence and prevalence statistics on acute rheumatic fever and rheumatic heart disease, the Kentucky State Medical Association, the Kentucky Heart Association, and the Kentucky State Department of Health jointly sponsored a survey in May of this year, according to Russell Teague, M.D., Commissioner of Health.

Questionnaires were sent to each of the 2531 licensed physicians in the state, requesting estimates of the number of cases of acute rheumatic fever and rheumatic heart disease seen in the year of 1957. There were 641 total replies. Of the total, 431 were considered useful, coming from physicians actively concerned with the care of rheumatic fever patients.

Summary of the data received reveals that: (1) 1094 acute episodes of rheumatic fever were seen in the year of 1957 by 297 of the reporting physicians, with 379 of these patients sustaining evidence of cardiac injury, and (2) 2674 cases of chronic rheumatic heart disease were attended by 316 reporting physicians during the year in question.

Applied to an adjusted age group of 5 to 24 years, this produces an estimated incidence of 4.8 per 1000 and an estimated prevalence of 14.0 per 1000 for the state.

Since the majority of the respondents indicated a willingness to participate in a further incidence study of rheumatic fever, file cards for record-keeping of such information have been prepared and mailed to all general practitioners, internists, and pediatricians in the state. It is hoped that these cards will be kept up-to-date by all the physicians concerned. Only through such combined effort and cooperation can accurate information be collected, with the eradication of disability and death from rheumatic heart disease our ultimate goal.

Digest of Minutes of the KSMA Council Meeting on July 31, 1958*

The Chairman of the Council explained that this was an open meeting to which all members of the Association were invited and that it was held for the purpose of letting the membership see how the Council operates. He welcomed the guests that were present.

The report of the President was heard, followed by the full and thought-provoking report of both Delegates to the 1958 Annual Meeting of the AMA. The Headquarters Office report was discussed by the Secretary and the Commissioner of Health made comments.

Poison Control

The Council then heard a recommendation by Wyatt Norvell, M.D., New Castle, chairman of the Kentucky Rural Health Council, that KSMA participate in efforts with several state-wide groups, including the Kentucky Pharmaceutical Association and the State Department of Health, to set up poison control centers over the state. The Council accepted this recommendation and also authorized the Chairman of the Council, Walter L. O'Nan, M.D., Henderson, and Doctor Norvell to appoint a member to represent KSMA.

A recommendation of the Insurance Committee that a standard short claim insurance form be accepted was heard. The Council was told the form was acceptable both to the insurance companies and to the members of the KSMA Insurance Committee. Action, however, was deferred on the form until the meeting of the 1958 House of Delegates.

Editor Resigns

A letter from Guy Aud, M.D., Louisville, Editor of The Journal of KSMA, stating that he was resigning as Editor because of his health was read. The Council accepted his resignation with great reluctance and authorized the Headquarters Office to express its appreciation to Doctor Aud for the two years of service that he had rendered as Editor and the many years he had rendered to The Journal as chairman of the Advisory Committee to the Editor. Sam A. Overstreet, M.D., Louisville, was elected as Editor of The Journal to succeed Doctor Aud, and George W. Pedigo, Jr., M.D., Louisville, was named associate editor.

The Chairman of the Council then read a recommendation from the Legislative Committee. It was pointed out that legislation pertaining to the health of the people and matters of interest to the profession in the legislative halls of both the national and state level was becoming of increasing importance. The Legislative Committee felt that the medical profession should make a greater effort to coordinate its activities and to plan more effective efforts in this field. In order to do this it was recommended that a full-time representative for this type of work be employed by the Association. After much discussion this recommendation was accepted pending the willingness of the Association to finance such an effort.

Rural Scholarship Discussed

Doctor O'Nan pointed out that the Rural Kentucky Medical Scholarship Fund now has more than $225,000 in its revolving fund; that it had helped or was helping some 150 students become physicians; and that these physicians would practice in rural areas. It was pointed out that it was necessary to follow almost 100 students and recently graduated doctors in order to adequately administer this Fund. It was indicated that the Board of Trustees of the Scholarship Fund was prepared to contribute to the payment of salary to a Field Secretary in return for 1/5th or 1/4th of his time working on the Scholarship Fund. This recommendation was accepted and it was indicated that Bobbie R. Grogan, the Assistant Executive Secretary, would take over these duties.

Postgraduate Education

The Committee on Postgraduate Medical Education presented a recommendation through its Chairman, Walter S. Coe, M.D., Louisville. Doctor Coe pointed out that the demands for a more adequate postgraduate medical education program in our Association were increasing and he related some of the difficulties that had been experienced in trying to develop such a program. For one thing, he stated, less than 1 per cent of the Association's budget was allotted to this program, which, in the opinion of his committee, should take second place to no other Association activity.

The first request of the Committee was that the Council authorize the reorganization of the Committee on Postgraduate Medical Education to take in certain groups, such as the Universities of Louisville and Kentucky, the Academy of General Practice, either the Kentucky Surgical Society or the Kentucky Chapter of the American College of Surgeons, the Kentucky Chapter of the American College of Physicians, the Pediatric Association, and two members at large who are general practitioners. The terms of office would be staggered so that each appointee would serve three years so that there would be a continuity in membership. This recommendation the Council accepted.

The second request of the Committee was for adequate funds to develop such a program. After full discussion of what was contemplated, Doctor Coe indicated that a minimum of $10,000 a year would be required to develop and maintain any worthwhile program in this field.

Recommend Dues Increase

The Council then considered as a whole the Legislative request, the request of the Committtte on Postgraduate Medical Education, and the Rural Kentucky Medical Scholarship Fund, and other activities of the Association which required funds. After considerable debate, the Council voted to ask that the

**As authorized by the 1956 session of the House of Delegates, the Journal is presenting a digest of the minutesof the July 31 meeting of the Council of the KSMA.*

Committee to Study the Constitution and Bylaws present a recommendation to the 1958 House of Delegates calling for an increase in dues with a certain portion of it earmarked for use by the Committee on Postgraduate Medical Education.

The Council then considered the appeal of Frederick P. Zuspan, M.D., McDowell, Ky., an employee of the UMWA Hospital there, who had been refused membership in the Floyd County Medical Society. Following a careful and lengthy consideration of the matter a motion was duly made, seconded and carried without dissenting vote that the Council of KSMA inform Doctor Zuspan that because of the autonomous nature of county societies it is powerless to require the Floyd County Medical Society to admit him to membership, but that under the bylaws the Council grants him the privilege of applying to an adjacent county for membership therein.

Committee Appointed

The Council then agreed to authorize the President and the Chairman of the Council to appoint a committee of five to "meet with representatives of third party medicine and deal with problems relating thereto."

The Council then accepted a recommendation from the Committee to Study a Change in the Annual Meeting date that no changes be made at this time. It set the dates of September 19, 20 and 21 for the 1961 Annual Meeting and refused to act on a suggestion that a committee be appointed to consider the new Kentucky Fair and Exposition Center as a probable meeting place.

William R. Willard, M.D., vice-president of the University of Kentucky in charge of the Medical Center, recommended the continuance of the Advisory Committee from KSMA to the University of Kentucky with the Council appointing members of the committee as their present terms expire. This recommendation was accepted.

Sympathetic consideration was given to the request of the Jefferson County Medical Society Auxiliary that booth space be furnished for it to conduct a raffle. The request was regretfully refused because of lack of space and other considerations.

UK Med. Center Receives Grant from Public Health Service

A grant of $174,547 has been approved by the U. S. Public Health Service for the University of Kentucky to use for equipment in its new medical science research building.

The grant—one of several given by the federal agency for the expansion of health-research facilities—brings to $1,407,000 the total federal funds to be used for health-research facilities at the UK Medical Center.

William R. Willard, M.D., Medical Center vice president, said that none of the research equipment has been ordered although the medical-science building is currently under construction. Tentative date for receiving the first medical students is the fall of 1960.

Dr. Smith Named Medical Director of Crippled Children's Comm.

Marjorie K. Smith, M.D., a graduate of Tufts College Medical School in 1930 and the recipient of a master of public health degree from the Massachusetts Institute of Technology, is the new medical director of the Kentucky Crippled Children's Commission.



As medical director, Doctor Smith, who came to Louisville from New York where she was with the City Bureau of School Health, will be in charge of state-wide services to crippled children, will direct the commission's staff, consult with lay and professional organizations, and work with Miss Marian Williamson, the commission's executive director.

Doctor Smith was formerly college physician at Mississippi Stae College for Women and was head of crippled children's services in Montana, her native state. In 1949-50, she was medical director at the International Refugee Organization's Village in Bad Aibling, Germany. While in New York, she also taught at Hunter College and was ship's physician for the New York Floating Hospital. She took her pediatric training at Boston Floating Hospital of the N. E. Medical Center and University Hospital, New York City.

Locations Listed for Meetings Of Specialty Groups

While attending the 1958 Annual Meeting, you will want to be present for one or more of the specialty group meetings to be held Wednesday afternoon, September 24, at Columbia Auditorium or in one of three nearby churches.

So that you may plan in advance to attend, the location of each of the 13 specialty group meetings is listed below:

Memorial Auditorium

Kentucky Academy of General Practice—Main Auditorium.

Kentucky College of Surgeons—Second Floor Ballroom.

First Christian Church

Kentucky Society of Anesthesiologists—Room 31.

Kentucky College of Chest Physicians—Room 19.

Kentucky Eye, Ear, Nose and Throat Society—Room 25.

Kentucky Orthopaedic Society—Room 36.

Kentucky Society of Pathologists—Room 34.

Kentucky Academy of Pediatrics—Room 28.

Kentucky Psychiatric Association—Main Floor Sunday School Assembly Room.

Kentucky Public Health Physicians—Room 30.

Kentucky Radiological Society—Room 20.

Calvary Episcopal Church

Kentucky Obstetrical and Gynecological Society—

(Continued on next Page)

Sunday School Assembly Room.

First Unitarian Church

Kentucky College of Physicians—Breaux Hall, First Floor.

Women's Medical Group to Meet in Louisville Sept. 23

All women physicians in the state are cordially invited to attend the semi-annual meeting of the Kentucky Chapter, Branch Forty-nine, of the American Medical Women's Association in Parlors A, B, and C of the Brown Hotel in Louisville on Tuesday, September 23 at 7 p.m.

At the meeting, which is being held in conjunction with the KSMA Annual Meeting, the Medical Woman of the Year will be honored. This award will be to recognize a woman physician in the state for her outstanding achievements in the field of medicine. It is hoped that Katharine W. Wright, M.D., Evanston, Illinois, recently inaugurated president of the American Medical Women's Association, will be the guest speaker at the September meeting.

A branch of the large group of women physicians, the group was organized early this year and is composed of 23 active members and eight junior members. At the April meeting Peggy Howard, M.D., Louisville, was elected president of the Kentucky branch. Rebecca Hall Hechter, M.D., was elected vice president and Letitia S. Kimsey, M.D., was chosen secretary.

Dr. Beasley Honored at Hyden

William Bodbie Rogers Beasley, M.D., medical director of the Frontier Nursing Service at Hyden, Ky., since 1956, was honored at a surprise party staged by Leslie County businessmen at the Hyden High School gymnasium July 25. Cited for outstanding devotion to his church and untiring service to his fellowmen, the physician was presented a station wagon, a movie camera and projector, and was made a Kentucky Colonel by Fred Bullard of Hazard, representing Gov. A. B. Chandler.

A native of Memphis, Tenn., Doctor Beasley formerly was a medical missionary in Africa and also practiced medicine in England. He holds degrees from the University of the South and the University of Tennessee School of Medicine.

Dr. McPheeters Gets Interstate Post

Harold L. McPheeters, M.D., Mental Health Commissioner, has been named Kentucky administrator for the Interstate Compact on Mental Health. He was appointed by Gov. A. B. Chandler.

Kentucky's participation in the compact, a reciprocal agreement between a number of states, was approved by the 1958 Legislature.

Dr. Teague Elected Commissioner

Russell Teague, M.D., was recently elected to his first full four-year term as State Commissioner of Health and Secretary of the State Board of Health. Doctor Teague was originally elected to these positions in 1956 to fill out the unexpired term of Bruce Underwood, M.D., who resigned in February of that year.

KAGP Meet at Fort Knox Hospital Set for October 30

The annual meeting of the Kentucky Academy of General Practice at Ireland Army Hospital, Fort Knox, has been scheduled for Thursday, October 30, according to an announcement from Homer J. Martin, M.D., Louisville.

All members of the Academy and other interested physicians are invited to attend the meeting which will include seven scientific presentations, by members of the hospital staff, lunch, and a tour and preventive maintenance display in the afternoon. The program is acceptable for Category 1 Credit in the Academy.

Following is the program scheduled for the meeting:

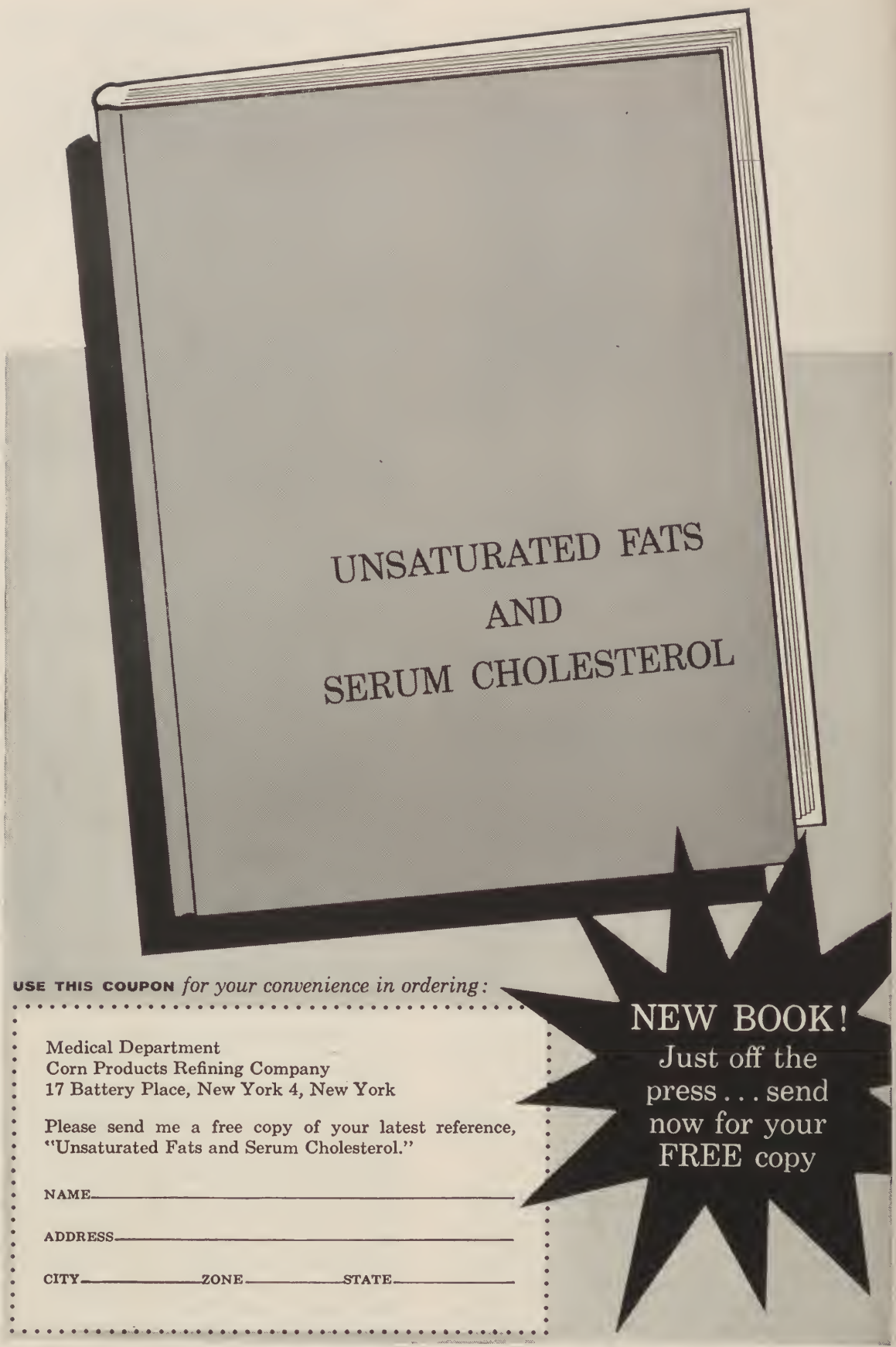
8:30	Registration
9:00	"Insect Bites," David G. Miller, M.D., Consultant to the Surgeon General in General Practice
9:30	"X-Ray in General Practice," Lt. Col. Russell E. Graf, MC, Chief of X-Ray Service
10:00	"Renal Disease in Children" Capt. George L. Blum, M.C., Pediatrician
10:45	Coffee
11:00	"Current Therapy of Venereal Diseases" Lt. Col. Urban L. Throm, II, M.C. Chief, Psychiatry and Neurology Service
11:30	"Character and Behavior Disorders" Lt. Col. Ralph E. Campbell, M.C. Chief, Psychiatry and Neurology Service
12:00	"Therapy of Angina" Lt. Col. Jules J. McNerney, M.D. Chief, Medical Service
12:30	"Recent Advances in Laboratory Procedures" Lt. Col. Edward J. Fadell, M.D. Chief Laboratory Service
1:00	Lunch
2:30	Tour—Preventive Maintenance Display

Med. Assistants to Meet in Chicago

All medical assistants are cordially invited to attend the second annual meeting of the American Association of Medical Assistants in Chicago at the Palmer House on October 31 and November 1 and 2.

The three-day program will include business sessions, a tour of AMA Headquarters, and a welcoming address by F. J. L. Blasingame, executive vice president of the AMA. For more information on the meeting Assistants should write Miss Hallie Cummins, Caro State Hospital, Caro, Michigan.

Commenting on the question of whether postgraduate medical seminars held on cruise ships are tax deductible income tax items, the magazine, "MD" says: "Tax experts opinion is that the cost of a cruise-seminar is deductible if (a) the cruise ship is chartered for that special purpose, a doctor attends to improve medical skills, with most of every day devoted to the seminar, and attendance records are kept; (b) the fees of the seminar faculty are included in the fares paid by doctors; (c) the cruise is incidental to the seminar. Additional costs of sightseeing or personal expense incurred by physicians during the cruise are not deductible."



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MAZOLA CORN OIL, a natural food and a superior salad and cooking oil, used as part of the daily diet, can be helpful in the control of serum cholesterol levels.

Extensive clinical findings now show that serum cholesterol levels tend to be lower when an adequate amount of MAZOLA CORN OIL is part of the daily meals... high levels are lowered, normal levels remain normal.

MAZOLA...the only readily available vegetable oil made from golden corn oil... is rich in the important unsaturated fatty acids. 85% of all the fatty acids in MAZOLA are unsaturated and 56% of the fatty acid content is linoleic.

As a result, MAZOLA CORN OIL is unusually well suited for helping achieve dietary adjustments commonly recommended by authorities on nutrition—that from one-third to one-half of the total fat in-take should be of the unsaturated type when serum cholesterol control is a problem.

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For a 3000 calorie diet	2.5 tablespoonsful
For a 2000 calorie diet	1.5 tablespoonsful

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Hospital Committees on Infection Recommended by Commission

The gravity of the presence of infections in hospitals is stressed in a bulletin of the Joint Commission of Accreditation of Hospitals urging that hospitals set up systematic controls.

Pointing out that each hospital should develop its own method to meet its specific needs, the Commission suggested a three-point approach. It recommended: 1. a committee on infections; 2. a review of existing practices; 3. control of use of antibiotics.

The committee on infection would be responsible for investigations, control and prevention of infection within hospitals. Membership would include the hospital's medical staff, administration and nursing service personnel.

Its responsibilities, as outlined by the Commission, would be four-fold:

1. Establishment of definite controls. Control measures must have validity.

2. Establishment of techniques for discovering infections on patients who have left the hospital, through trace of source of infection for which a patient may be admitted and periodic sampling by letter, card, call or visit of discharged patients.

3. Making certain that bacteriologic services in or out of the hospital are available.

4. Establishment of a system of reporting all infections among patients and personnel and keeping records as a basis for studying the source of infections.

ACS to Hold Congress in October

The 44th annual Clinical Congress of the American College of Surgeons will be held in Chicago at the Conrad Hilton Hotel from October 6-10. More than 10,000 surgeons, physicians and students are expected to attend the meeting, which is the largest gathering of surgeons for postgraduate medical education in the world.

On the final evening of the meeting, more than 1,100 initiates will be presented for Fellowship in the College, Honorary Fellowships conferred, and officers inaugurated. Major addresses will be made by Newell W. Philpott, M.D., Montreal, incoming president of the College, George J. Curry, M.D., Flint, Michigan, authority on care of the injured, and Gunner Thorsen, M.D., Stockholm, Sweden, distinguished surgeon and writer in the field of essential body fluids.

Muldraugh Hill Society Meets

Approximately 50 physicians attended the meeting of the Muldraugh Hill Society at the Ireland Army Hospital, Fort Knox, on August 14, according to Joseph C. Ray, M.D., Society secretary.

Physicians on the program included: Major John B. Sarracino, M.C., Fort Knox; Israel Muss, M.D., Louisville; Captain Paul D. Redleaf, M.C., Fort Knox; C. C. Starr, M.D., Louisville; Marion Beard, M.D., Louisville, Capt. Jerome Fabricant, M.C., Fort Knox. Discussions followed each presentation. The next meeting of the society is scheduled for December at St. Anthony's Hospital, Louisville.

Hopkinsville Hospital Picked For Alcoholic Cure Unit

Western State Hospital, Hopkinsville, has been designated as the state treatment center for alcoholics—the first such unit in Kentucky.

The official order for establishment of the center was issued by Mental Health Commissioner Harold L. McPheeters, M.D., who said the Alcoholic Commitment Law passed by the 1958 General Assembly paved the way for the action. The statute, which became effective on June 19, provides that alcoholics may be committed by the courts to a state hospital designated for that purpose.

A special unit for alcoholics has been in operation at Western Hospital since last October, Doctor McPheeters said. These patients were committed and treated as psychiatric patients in an open ward which had only 21 beds. Under the new setup, a closed ward with 30 beds will also be used, the commissioner explained.

The alcoholic unit is directed by Kurt Schmidt, M.D., clinical director at Western.

U. L. School of Medicine Gets Six New Instructors

Appointment of six instructors at the University of Louisville School of Medicine and the promotion of six others have been approved by the university trustees.

Named as instructors were Ellis A. Fuller, M.D., Jack L. Mulligan and Arthur C. White, medicine; Aaron T. Marcum, M.D., child health; C. H. Jarboe, M.D., research associate in pharmacology; E. C. Shrader, M.D., ophthalmology.

Promoted were Harold W. Conran, M.D., and William J. Hockaday, M.D., to assistant professors of psychiatry; Daniel G. Costigan, M.D., Rudy J. Ellis, M.D., and James M. Riley, M.D., to assistant professors of orthopedic surgery, and Thomas G. Scharff, to assistant professor of pharmacology.

Resignations of two faculty members were accepted: John Lyford, III, M.D., as assistant professor of orthopedic surgery to become chief of professional services at Hines Veterans Administration Hospital, Chicago, and Chester B. Theiss, M.D., as instructor of anesthesiology.

Dr. Bizot Advisory Board Chairman

William H. Bizot, M.D., Louisville, has been named to succeed A. J. Miller, M.D., as chairman of the Red Cross Blood Center's Medical Advisory Board. Doctor Miller had held the post since the center opened in 1949.

Other appointments to the committee included: Robert S. Dyer, M.D., Max L. Garon, M.D.,; Laman Gray, M.D.; H. Hart Hagan, M.D.; Marvin Lucas, M.D.; W. Fielding Rubel, M.D.; and Samuel D. Weakley, Jr., M.D., all of Louisville; and Daniel H. Cannon, M.D., New Albany, and M. D. Klein, M.D., Shelbyville. Doctor Bizot announced that the Board would welcome suggestions and comments on the Center from members of the medical profession.

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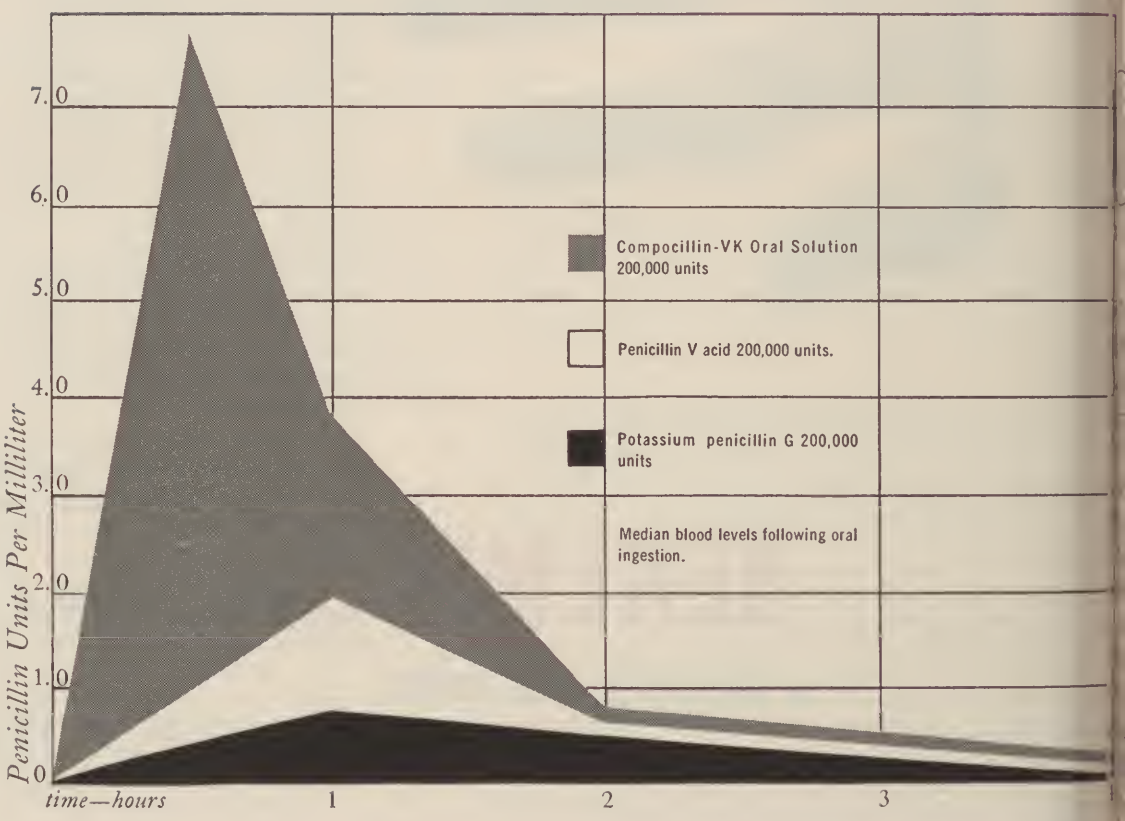
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Penicillin Units Per Milliliter
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time—hours
1
2
3
Compocillin-VK Oral Solution 200,000 units
Penicillin V acid 200,000 units.
Potassium penicillin G 200,000 units
Median blood levels following oral ingestion.



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oral solution of potassium penicillin V



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granules for oral solution

w, or oral administration, COMPOCILLIN-VK anes offer you a solution of potassium penliV. Developed by Abbott Laboratories, g nules are dry and easily reconstituted h ater.

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Cpocillin-VK is indicated for all infecns isceptible to oral penicillin therapy. Also, tr ting recurring rheumatic fever and in na ng rheumatic carditis. COMPOCILLIN-VK y e used in counteracting complications m evere viral attacks.

The initial recommended dose: In acute infections, the range is from 125 mg. (200,000 units) three times daily to 250 mg. (400,000 units) every four hours. For young children, the adult dose may be reduced in proportion to age and weight. For prophylactic use, 125 mg. (200,000 units) may be administered once or twice daily.

COMPOCILLIN-VK Granules for Oral Solution come in 40-cc. and 80-cc. bottles. Each 5-cc. teaspoon of the reconstituted solution represents 125 mg. (200,000 units) of potassium penicillin V. The dry granules stay stable under ordinary room temperatures. When reconstituted, the solution will remain potent for two weeks under refrigeration.

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News Items

Thomas N. Mackrell, M.D., a graduate of the Univeristy of Pittsburgh School of Medicine in 1946, is affiliated with the University of Louisville School of Medicine as an anesthesiologist. He interned at the University of Pittsburgh Medical Center and Presbyterian Hospital. Before coming to Louisville he was at the University of Pennsylvania in Philadelphia.

Richard W. Dame, M.D., who is limiting his practice in Louisville to internal medicinc, is a graduatc of the Cornell University Medical College in 1954. He took his internship and residency training at General Hospital in Louisville.

Kirk O. Metzerott, M.D., who was a fellow in anesthesiology in the Mayo Foundation in Rochester, Minnesota, has opened an office in the Heyburn Building. Doctor Metzerott graduated from George Washington University School of Medicine in 1952. He interned at Presbyterian Hospital in New York City, before taking his residency at the Mayo Clinic.

Robert E. Arnold, M.D., has opened an office in Mount Vernon for the general practice of medicine. Doctor Arnold graduated from the University of Louisville School of Medicine in 1957 and interned at Jefferson Davis Hospital in Houston, Texas.

Carl E. Shroat, M.D., a graduate of the University of Louisville School of Medicine in 1956, has started practice in Frankfort He took one year of internship and one year of residency training at the Columbus Mcdical Center, Columbus, Georgia.

Mary C. McNeil, M.D., who is limiting her practice in Cumberland to obstetrics and gynecology, graduatcd from the College of Medical Evangelists in 1953. Before coming to Cumberland, she trained at Nashville General Hospital, Vanderbilt University Hospital, the VA Hospital in Martinsburg, West Virginia.

Joseph G. Braun, M.D., a graduate of Cincinnati College of Medicine in 1957, has started the general practice of medicine in Newport. Doctor Braun interned at St. Elizabeth Hospital in Covington.

Ronald O. Naser, Jr., M.D., has started the general practice of medicine in Brandenburg. A graduate of the University of Louisville School of Medicine in 1955, he has recently completed a tour of duty with the U. S. Navy, interning at the U. S. Naval Hospital, Portsmouth, Va.

Harold William Conran, M.D., Middletown, has been named director of professional services of the Kentucky Department of Mental Health. He will act as assistant commissioner of the department, said Mental Health Commissioner Harold L. McPheeters, M.D., in announcing the appointment. For the past year Doctor Conran was chief of medical services at Central State Hospital, Lakeland. A native of Canada, he formerly practiced medicine in Newfoundland. He served in Canada's Department of National Health and Welfare from 1947-50 and was superintendent of the Fiji Mental Hospital, Fiji Islands, from 1950-57. He has degrees from Queen's Medical College, Kingston, Ontario; the University of Toronto, and London's Royal College of Physicians and Surgeons.

Arthur C. White, M.D., has joined the University of Louisville School of Medicine faculty. An internist, he graduated from Harvard Medical School in 1952, interned at Vanderbilt Hospital, Nashville, and also completed his internship in internal medicine there.

David H. Smith, M.D., who graduated from the Medical College of Virginia in 1948, is now practicing surgery in Harlan. Doctor Smith interned at Union Memorial and University Hospital in Baltimore and took his residency training at the Emergency Hospital, Washington, D. C.

Jarrett Ringham, M.D., has opened her offices in Louisville for the practice of adult and adolescent psychiatry. Doctor Ringham graduated from the University of Louisville School of Medicine in 1946 and interned at Passavant Memorial Hospital in Chicago. She was associated with the Cornell Medical Center in New York and had practiced in Evansville.

Ellis A. Fuller, M.D., has become associated with Marion F. Beard, M.D., in the practice of internal medicine and hematology. A graduate of the University of Pennsylvania School of Medicine in 1953, Doctor Fuller interned and took his residency training at University Hospital, Ann Arbor, Michigan.

Bernard I. Popham, M.D., has moved his office from Shepherdsville to the Medical Arts Building in Louisville. A graduate of the University of Louisville School of Medicine in 1947, he interned at St. Joseph's Hospital, South Bend, Indiana, and took his residency training in internal medicine at St. Joseph's Hospital in Louisville.

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references:
1 Grieble, H.G., and Jackson, G.G.: Prolonged Treatment of Urinary-Tract Infections with Sulfamethoxypyridazine. *New England J. Med.* 258:1-7, 1958
2. Editorial: *New England J. Med.* 258:48-49, 1958.

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NEWS ITEMS

E. S. Maxwell, M.D., Lexington's first pathologist who plans to retire from active practice on September 1, was honored by his friends and associates with the presentation of a portrait to the Fayette County Medical Society. The oil painting of Doctor Maxwell will hang in the Society's meeting room at the Good Samaritan Hospital.

W. J. Shacklette, M.D., and his wife were honored at an open house recently celebrating the 60th anniversary of his entry into the medical profession. Doctor Shacklette, who is 87 years old, is a graduate of the University of Louisville Medical School.

R. C. Smith, M.D., Newport, was recently appointed to the Advisory Committee on Mental Health by Governor A. B. Chandler.

Thomas G. Perkins, M.D., who graduated from the University of Louisville Medical School in 1957, has opened an office in Paris for the practice of general medicine. A native of Springfield, Ky., he interned at Springfield City Hospital, Springfield, Ohio.

Robert Arnold, M.D., a native of Louisville, has opened an office in Mount Vernon where he will practice general medicine. Doctor Arnold completed his medical education at the University of Louisville, graduating in 1957 and has just completed his internship at the Baylor College of Medicine in Houston, Texas. He is a member of the staff of the Rockcastle County Baptist Hospital.

Harold L. Bushey, M.D., a native of Illinois, has started the practice of internal medicine in Barbourville. A graduate of the University of Rochester Medical School, Rochester, N. Y., in 1954, Doctor Bushey took his internship and residency training at Crawford W. Long Memorial Hospital, Atlanta, Georgia, and at the Veterans' Administration Hospital, Memphis, Tennessee.

Roy B. McEndre, M.D., who will limit his practice to obstetrics and gynecology, has become associated in practice with **J. C. Denniston, M.D.,** of Lewisburg. A native of Kentucky, he graduated from the University of Louisville Medical School in 1955. For the past two years he has been assistant chief of the obstetrical and gynecologic service at the U. S. Army Hospital, Fort Campbell.

A. J. Mueller, M.D., has become associated with **James B. Jones, M.D.,** Lexington, in the practice of obstetrics and gynecology. A native of Tennessee, Doctor Mueller received his M.D. degree from the University of Tennessee College of Medicine in 1952. He interned at John Gaston Hospital following his graduation, served with the air force from 1953-55, and took residency training at Vanderbilt University Hospital and the University of Arkansas Medical Center before coming to Lexington.

Harold Simms, M.D., who recently completed his internship at John Sealy Hospital at Galveston, has opened an office in Springfield for the practice of general medicine. Doctor Simms is a graduate of the University of Louisville Medical School, Class of 1957.

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James P. Andrews, M.D., has recently been appointed to the staff of the Lexington Clinic. Doctor Andrews who limits his practice to pathology, received his M. D. from Western Reserve in 1950. A rotating internship at Christ Hospital, Cincinnati, was followed by two years of military service. He served a two-year residency in clinical pathology and pathologic anatomy at Duke University followed by a two-year fellowship at the Cleveland Clinic.

Kenneth D. McGinnis, M.D., a native of Lexington, graduated from Northwestern in 1953 and then served an internship at Charity Hospital of Louisiana in New Orleans. He completed a three-year residency in Diagnostic and Therapeutic Radiology at Henry Ford Hospital in Detroit during 1957, and served as associate radiologist on the staff there until 1958.

William G. West, Jr., M.D., a graduate of Vanderbilt University School of Medicine in 1957, has started practicing in Madisonville. He took his internship training at University Hospital in Jackson, Mississippi.

Bruce A. Baber, M.D., has completed his internship training at Roanoke Memorial Hospital, Roanoke, Virginia. He is now practicing general medicine in Madisonville. Doctor Baber graduated from the Medical College of Virginia in 1957.

N. H. Talley, M.D., has recently opened an office in Princeton for limited general practice and general surgery. During the past two years, Doctor Talley, who graduated from Vanderbilt School of Medicine in 1951, has served as chief resident in surgery at St. Thomas Hospital, Nashville. Before going to St. Thomas he was assistant resident in surgery at Thayer VA hospital. He had previously served two years as a resident surgeon at Grady Memorial Hospital in Atlanta and two years in the U. S. armed forces.

Annual Meeting

William A. McManus, M.D., a graduate of the University of Louisville School of Medicine in 1953, has become associated with **Charles B. Wathen, M.D.,** Owensboro, in the practice of general surgery and gynecology. He took his internship training at Charity Hospital in New Orleans and then continued at the hospital with four years of residency training. Doctor McManus is a native of Owensboro.

Royce Dawson, M.D., a former Daviess countian, has returned to Owensboro to practice surgery in association with **Howell J. Davis, M.D.,** and **Leslie C. Dodson, M.D.** A graduate of Vanderbilt University School of Medicine in 1952, Doctor Dawson served one year of internship and five years of residency at Vanderbilt Hospital. During World War II he served with the 8th Armored Division in the European Theatre of Operations.



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1. Thomas, J. W.: Ann. Allergy 16:128, 1958

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In Memoriam

WILLIAM S. BURTON, M.D.
Louisville
1913 - 1958

William S. Burton, M.D., a former superintendent of the State tuberculosis hospital at Glasgow, died of cancer at his home in Louisville on August 15. He had been a consultant at Hazlewood Sanatorium since November.

Doctor Burton, a Virginian, was a graduate of the Medical College of Virginia, Richmond, in 1937. He came to Kentucky in 1943, and spent most of his time in affiliation with tuberculosis hospitals.

CHARLES D. MORRIS, M.D.
Louisville
1878 - 1958

A graduate of the University of Louisville Medical Department in 1901, Doctor Morris, who had practiced in Louisville for 55 years, died on July 19 at Baptist Hospital, Louisville.

Doctor Morris had engaged in general practice until his retirement two years ago. He was a native of Sulphur, Ky., and received his B. S. degree from Fairmont College there in 1898.

E. E. JOHNSTON, M.D.
Elizabethtown
1892-1958

E. E. Johnston, M.D., who was awarded the Army Commendation Ribbon for outstanding service while serving as manager of Nichols General Hospital in Louisville from 1945 to 1947, died at his home in Elizabethtown on August 8. He was 66.

A native of Huntington, Ind., Doctor Johnston served in both world wars, retiring from the Army with the rank of colonel in 1946. After leaving Louisville, he entered private practice in Elizabethtown. Illness forced him to retire several years ago.

MARCUS D. HALEY, M.D.
Stearns
1895 - 1958

Marcus D. Haley, M.D., who had practiced in Stearns and McCreary County since the late thirties, died of cancer of the lung at St. Joseph's Hospital in Lexington on July 25.

A graduate of Vanderbilt University School of Medicine in 1926, he started his practice at Worley and later moved to Stearns. Doctor Haley was a native of Brooksville, Kentucky. He took his internship training in Florida. During World War I, he served as a lieutenant in the U. S. Army.





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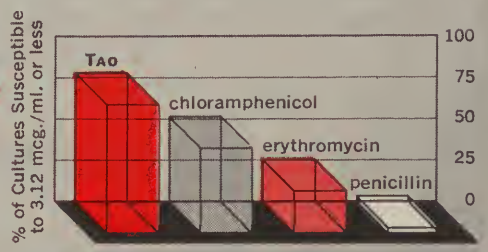
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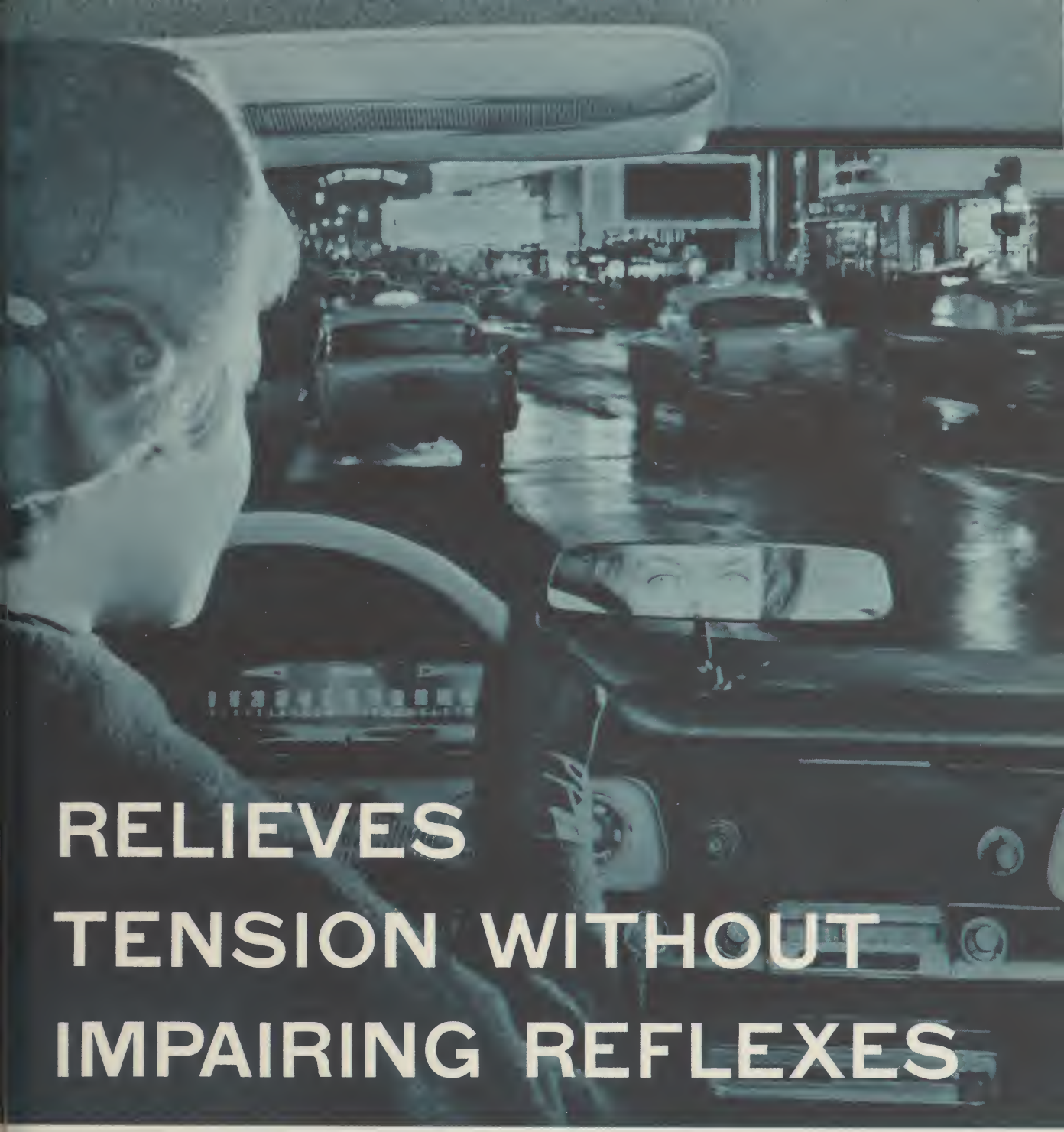
Supplied: Tao Capsules—250 mg. and 125 mg.; bottles of 60. Tao for Oral Suspension—1.5 Gm.; 125 mg. per teaspoonful (5 cc.) when reconstituted; unusually palatable cherry flavor; 2 oz. bottle.

References: 1. English, A. R., and Fink, F. C.: Antibiotics & Chemother. (Aug.) 1958. 2. English, A. R., and McBride, T. J.: Antibiotics & Chemother. (Aug.) 1958. 3. Wennersten, J. R.: Antibiotic Med. & Clin. Therapy (Aug.) 1958. 4. Celmer, W. D., et al.: Antibiotics Annual 1957-1958, New York, Medical Encyclopedia, Inc., 1958, p. 476.

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400 mg. scored tablets, 200 mg. sugar-coated tablets, bottles of 50.

*Marquis, D. G., Kelly, E. L., Miller, J. G., Gerard, R. W. and Rapoport, A.: Ann. New York Acad. Sc. 67: 701, May 9, 1957.

WALLACE LABORATORIES, *New Brunswick, N. J.*

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in the Menopause



triple benefits

first relieves apprehension, anxiety and irritability

second overcomes estrogen deficiency; relieves vasomotor and metabolic disturbances

third relaxes skeletal muscle; relieves low back pain, tension headache

Milprem®

MILTOWN® TRANQUILIZER WITH MUSCLE-RELAXANT ACTION + CONJUGATED ESTROGENS (EQUINE) ORALLY ACTIVE ESTROGEN

Each tablet contains:
Miltown (meprobamate, Wallace) . . . 400 mg.
2-methyl-2-n-propyl-1,3-propanediol dicarbamate
Conjugated Estrogens (equine) . . . . . 0.4 mg.

Supplied: Bottles of 60 tablets.

Dosage: 1 tablet t.i.d. in 21-day courses with one week rest periods; should be adjusted to individual requirements.

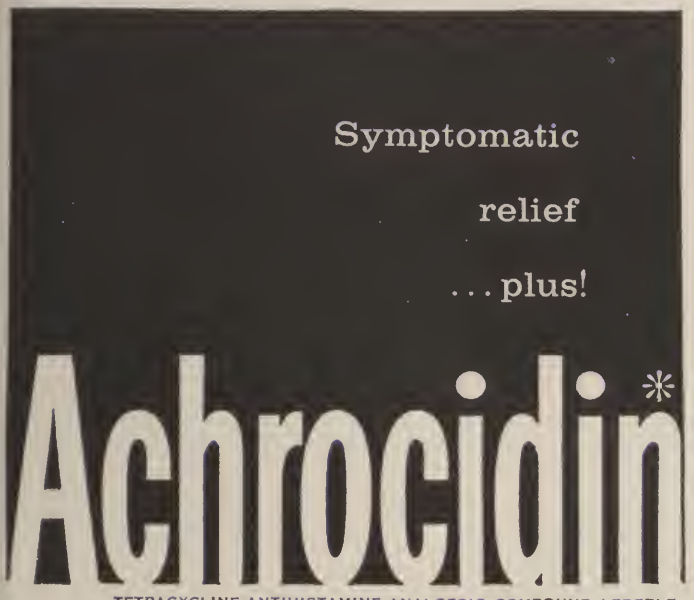
Literature and samples on request

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pneumonitis

adenitis

sinusitis

otitis

bronchitis

COMBINES: Traditional components for relief of the annoying symptoms of early upper respiratory infections...

PLUS: Protection against bacterial complications often associated with such conditions.

TABLETS (sugar coated)
Each contains:

ACHROMYCIN* Tetracycline	125 mg.
Phenacetin	120 mg.
Caffeine	30 mg.
Salicylamide	150 mg.
Chlorothen Citrate	25 mg.

Bottles of 24 and 100.

SYRUP (lemon-lime flavored, caffeine-free)
Each 5 cc. teaspoonful contains:

ACHROMYCIN* Tetracycline equivalent to Tetracycline HCl	125 mg.
Phenacetin	120 mg.
Salicylamide	150 mg.
Ascorbic Acid (C)	25 mg.
Pyrilamine Maleate	15 mg.
Methylparaben	4 mg.
Propylparaben	1 mg.

Bottle of 4 fl. oz.

Adult dosage for ACHROCIDIN Tablets and new caffeine-free Syrup is two tablets or teaspoonfuls of syrup three or four times daily. Dosage for children adjusted according to age and weight.
Available on prescription only.

Lederle **LEDERLE LABORATORIES,** a Division of AMERICAN CYANAMID COMPANY, Pearl River, New York
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Why ris
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†TRADEMARK, REG. U. S. PAT. OFF.—THE UPJOHN BRAND OF TETRACYCLINE

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(ALBAmycin† Phosphate plus ALBAmycin**)

your broad-spectrum antibiotic of first resort

effective against more than 30 common pathogens, even including resistant staphylococci.

available forms:

Panalba Capsules, bottles of 16 and 100 capsules. Each capsule contains:

albamycin phosphate (tetracycline phosphate complex) equivalent to tetracycline hydrochloride .....250 mg.
albamycin (as novobiocin sodium)...125 mg.

Panalba KM,†† Flavored Granules, 60 cc. size bottle. When sufficient water is added to fill the bottle, each teaspoonful (5 cc.) contains:

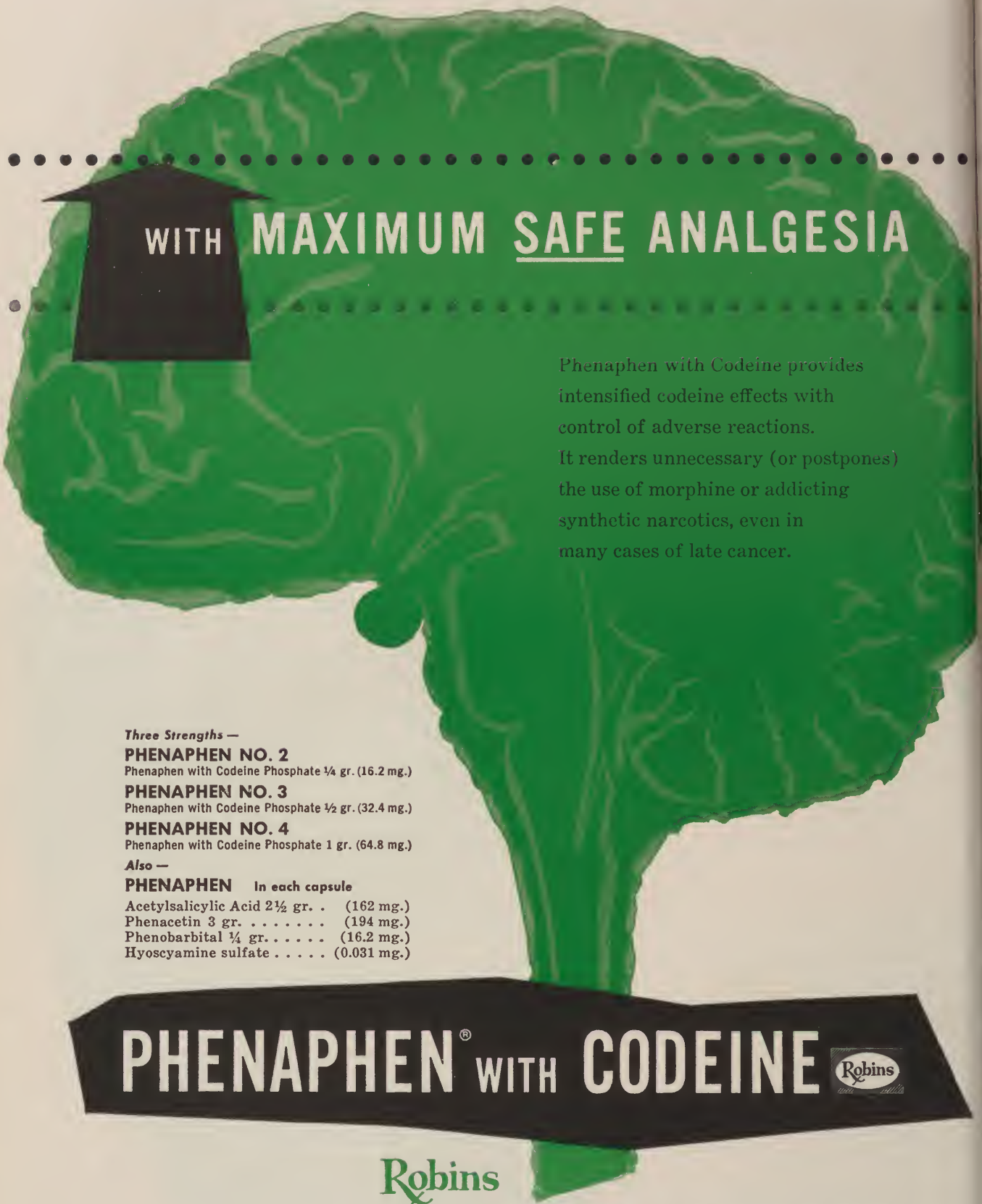
albamycin (tetracycline) equivalent to tetracycline hydrochloride .....125 mg.
albamycin (as novobiocin calcium)..62.5 mg.
potassium metaphosphate .....100 mg.

dosage:

Panalba Capsules
usual adult dosage is 2 capsules q.i.d.

Panalba KM Granules
For the treatment of moderately acute infections in infants and children, the recommended dosage is 1 teaspoonful per 15 to 20 lbs. of body weight per day, administered in 2 to 4 equal doses. Severe or prolonged infections require higher doses. Dosage for adults is 2 to 4 teaspoonfuls 3 or 4 times daily, depending on the type and severity of the infection.

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WITH MAXIMUM SAFE ANALGESIA

Phenaphen with Codeine provides intensified codeine effects with control of adverse reactions. It renders unnecessary (or postpones) the use of morphine or addicting synthetic narcotics, even in many cases of late cancer.

Three Strengths —

PHENAPHEN NO. 2
Phenaphen with Codeine Phosphate ¼ gr. (16.2 mg.)

PHENAPHEN NO. 3
Phenaphen with Codeine Phosphate ½ gr. (32.4 mg.)

PHENAPHEN NO. 4
Phenaphen with Codeine Phosphate 1 gr. (64.8 mg.)

Also —

PHENAPHEN In each capsule

Acetylsalicylic Acid 2½ gr. . (162 mg.)
Phenacetin 3 gr. . . . . (194 mg.)
Phenobarbital ¼ gr. . . . . (16.2 mg.)
Hyoscyamine sulfate . . . . . (0.031 mg.)

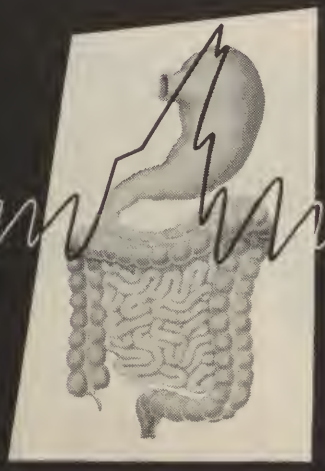
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Ethical Pharmaceuticals of Merit since 1878

in spasticity of the GI tract

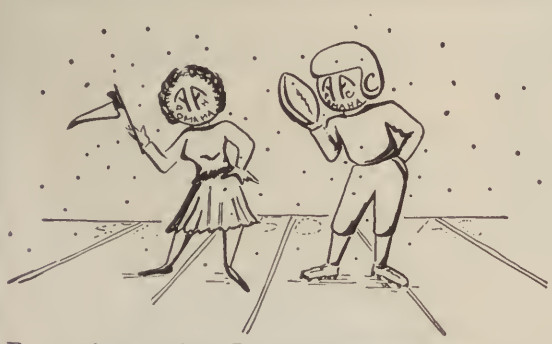


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125 mg.
with Phenobarbital
15 mg.

- *is an effective dual antispasmodic*
- *combining musculotropic and neurotropic action plus mild central nervous system sedation for "the butterfly stomach."*

dosage: one tablet before each meal and at bedtime.

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The Department of Occupational Health of the University of Pittsburgh is the fifth institution to be granted approval of a residency program in occupational health by the Council on Medical Education and Hospitals of the American Medical Association. The other four are Cincinnati, Rochester, Ohio State and Yale Universities. The University of Pittsburgh residency is for three years, two of which are based at the department's headquarters at the Graduate School of Public Health. The third, or in-plant, year is spent at one of the industrial health facilities approved for participation in the program.

congestive

DIURIL

CHLOROTHIAZI

BECKER, M. C., Simon, F. and Bernstein, A.: J. Newark Beth Israel Hosp. **9**:58 (January) 1958.

"On chlorothiazide the response was striking with . . . improvement in cardiac status and loss of toxic symptomatology. . . . One of the most important effects of the potent oral diuretic was the smooth continuous diuresis. There was less fluctuation in the weight . . . marked diminution in the number of acute episodes of congestive heart failure such as paroxysmal dyspnea and pulmonary edema. . . . [DIURIL] appeared as potent a diuretic as parenteral mercurials and indeed in some patients it was effective when parenteral mercurials failed. . . . We have encountered no patient who once responsive to chlorothiazide later developed resistance to it."

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SUPPLIED: 250 mg. and 500 mg. scored tablets DIURIL (chlorothiazide); bottles of 100 and 1,000.

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failure

markedly relieves pulmonary edema



ANY INDICATION FOR DIURESIS IS AN INDICATION FOR DIURIL

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Streptokinase-Streptodornase Lederle

Controls Inflammation and Swelling...Relieves Pain... Promotes Healing Through Enchancement of Fibrinolysis at the Site of Trauma or Infection.

References: 1. Innerfield, I.; Shub, H., and Boyd, L. J.: New England J. Med. 258: 1069 (May 24) 1958. 2. Miller, J. M.; Godfrey, G. C.; Ginsberg, M. J., and Papastrat, C. J.: J. A. M. A. 166:478 (Feb. 1) 1958. 3. Davidson, E; Prigot, A., and Maynard, A. de L.: Harlem Hosp. Bull. II: 1 (June) 1958 *Reg. U. S. Pat. Off.



TO ACCELERATE THE RECOVERY PROCESS

Established Efficacy and Safety: For five years VARIDASE, in parenteral form, has been used with success in many thousands of cases. Its ability to control inflammation, swelling and associated pain, aid penetration of antibiotics, and hasten healing has been demonstrated in such conditions as severe trauma, infected ulcerations, and following extensive surgery.

Now, Parenteral Effectiveness . . . Simple Buccal Route: New VARIDASE Buccal Tablets give your patients the benefits of systemic VARIDASE therapy without the inconvenience of repeated injections. Absorbed through the buccal mucosa in fully effective amounts, VARIDASE Buccal Tablets may be used as practical adjunctive therapy in your practice within these broad classifications:

Inflammation and edema associated with: trauma and infection • cellulitis • abscess • hematoma • thrombophlebitis • sinusitis • uveitis • chronic bronchitis • leg ulcer • chronic bronchiectasis.

Each VARIDASE Buccal Tablet contains 10,000 Units Streptokinase and 2,500 Units Streptodornase.

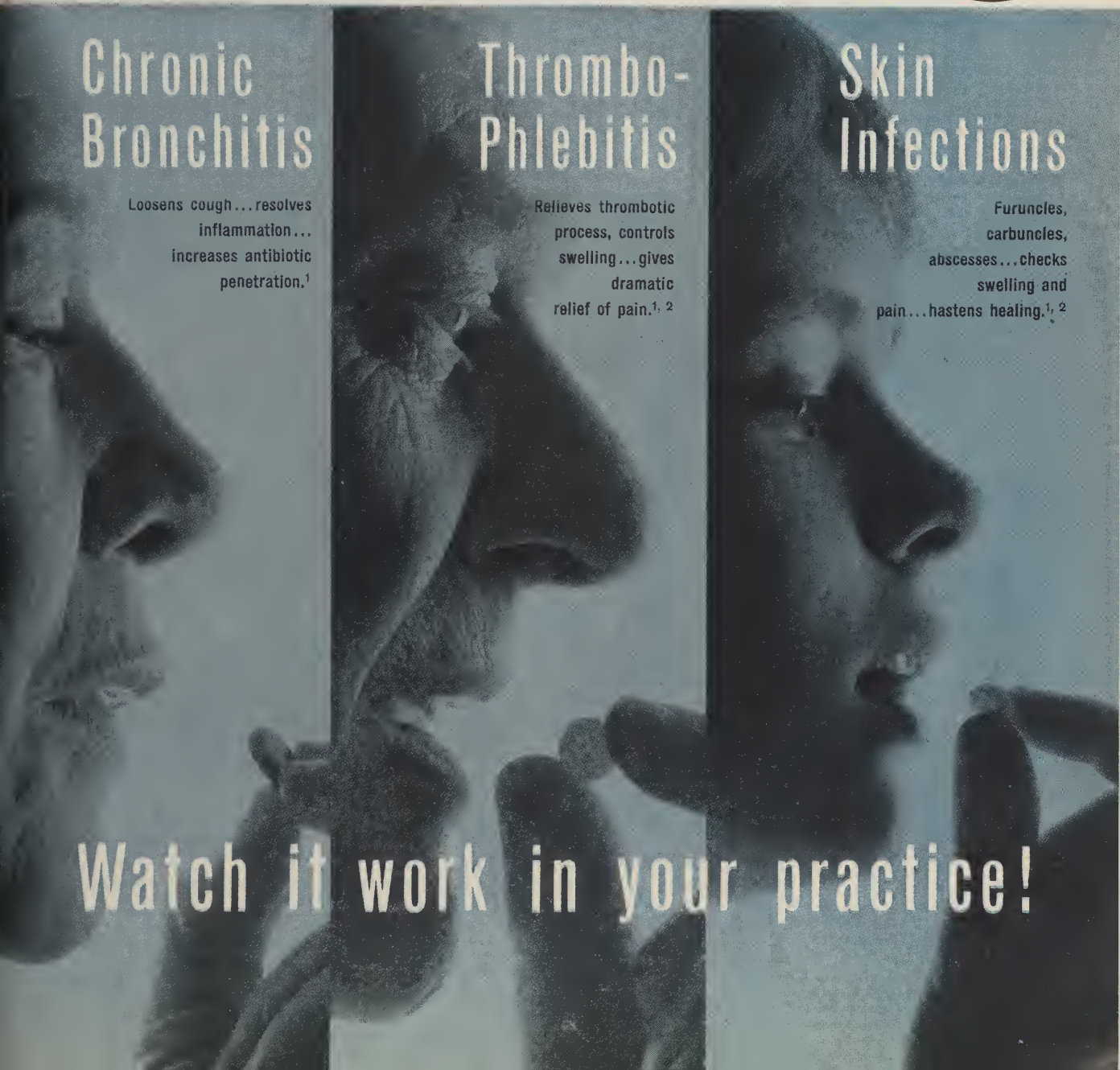
Administration: VARIDASE Buccal Tablets should be retained in the buccal pouch until dissolved. For maximum absorption patient should delay swallowing saliva.

Dosage: One tablet four times daily for a minimum of three days. When infection is present, VARIDASE Buccal Tablets should be given in conjunction with an antibiotic such as ACHROMYCIN* V Tetracycline and Citric Acid.

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Results with "... antacid therapy with DAA are essentially the same as ... with potent anticholinergic drugs."

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In recent years, a number of new synthetic antieholinergie drugs with numerous and varying side effects have been investigated for treatment of peptie ulcer. However, a double-blind study conducted recently by Cayer et al suggests that the use of sueh anticholinergic drugs is seldom neeessary. The authors concluded that "The perceentage of 'good to excellent' results obtained in patients on continuous long-term antacid therapy with DAA (74%) is essentially the same as that previously noted in ulcer patients treated under similar conditions with potent antieholinergic drugs alone."

The authors' choice of dihydroxy aluminum aminoaeetate (DAA) was based on the faet that "the tablet form of DAA (is) more active than a variety of straight aluminum hydroxide magmas." They further eommented that "Becausc of thc convenience of tablet medieation as eompared with the liquid gel—a eonvenience whieh in the use of other tablets is gained at the expense of therapeutic effeetiveness—dihydroxy aluminum aminoacetate was used exclusively."

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PETN + ATARAX®

(PENTAERYTHRITOL TETRANITRATE) (BRAND OF HYDROXYZINE)

why PETN? *For cardiac effect:* PETN is ". . . the most effective drug currently available for prolonged prophylactic treatment of angina pectoris."[1] Prevents about 80% of anginal attacks.

why ATARAX? *For ataractic effect:* One of the most effective—and probably the safest—of tranquilizers, ATARAX frees the angina patient of his constant tension and anxiety. Ideal for the on-the-job patient. And ATARAX has a unique advantage in cardiac therapy: it is anti-arrhythmic and non-hypotensive.

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1. Russek, H. I.: Postgrad. Med. *19*:562 (June) 1956.

Dosage and Supplied: Begin with 1 to 2 yellow CARTRAX "10" tablets (10 mg. PETN plus 10 mg. ATARAX) 3 to 4 times daily. When indicated this may be increased by switching to pink CARTRAX "20" tablets (20 mg. PETN plus 10 mg. ATARAX.) For convenience, write "CARTRAX 10" or "CARTRAX 20." In bottles of 100.

CARTRAX should be taken 30 to 60 minutes *before* meals, on a continuous dosage schedule. Use PETN preparations with caution in glaucoma.

ROERIG Rx

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For Speedier Return to Normal Nutrition

Meat...

in Inflammatory Conditions of the Colon

The physiologic depletion accompanying acute infectious and inflammatory conditions of the bowel makes replacement therapy the key to nutritional rehabilitation.

In addition to the loss of important electrolytes, such as potassium and sodium, large amounts of protein are lost in the fluid, blood and exudate from the bowel. In the acute state of such affections, utilization of what protein can be ingested is further affected by increased protein catabolism and by impairment of certain hepatic functions.

Dietary rehabilitation must be carried out within the framework of a diet restricted in fiber and in irritating substances. Foods allowed must be easily digested and appetizingly and attractively prepared to encourage eating.

Tender lean meats—finely ground in the initial diet and later served in a wide variety of appealing ways—can be an important source of the protein and minerals required by the convalescing patient.

Meat fits admirably into the requirements of the permitted diet not only because of its taste, digestibility, and physical characteristics, but also because of its contribution of high quality protein, the minerals potassium, iron, phosphorous, sodium, and magnesium, and all the known B vitamins.

The nutritional statements made in this advertisement have been reviewed by the Council on Foods and Nutrition of the American Medical Association and found consistent with current authoritative medical opinion.

American Meat Institute
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If Monilial overgrowth is a factor

Achrostatin* V

TETRACYCLINE (PHOSPHATE-BUFF) RED AND NYSTATIN

SUPPLIED:
CAPSULES, each 250 mg. tetracycline HCl equivalent (phosphate-buffered) and 250,000 units Nystatin. ORAL SUSPENSION (cherry-mint flavored) Each 5 cc. teaspoonful contains 125 mg. tetracycline HCl equivalent (phosphate-buffered) and 125,000 units Nystatin.

DOSAGE:
Basic oral dosage (6-7 mg. per lb. body weight per day) in the average adult is 4 capsules or 8 tsp. of ACHROSTATIN V per day, equivalent to 1 Gm. of ACHROMYCIN V.

*Trademark for U.S. P.I. Oint.

Combines ACHROMYCIN V with NYSTATIN

ACHROSTATIN V combines ACHROMYCIN† V...the new rapid-acting oral form of ACHROMYCIN† Tetracycline...noted for its outstanding effectiveness against more than 50 different infections...and NYSTATIN...the antifungal specific. ACHROSTATIN V provides particularly effective therapy for those patients who are prone to monilial overgrowth during a protracted course of antibiotic treatment.

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Joint inflammation and muscle spasm are the two elements most responsible for disability in rheumatic-arthritic disorders—and MEPROLONE is the one agent that treats both.

MEPROLONE suppresses the inflammatory process and simultaneously relieves aching and stiffness caused by muscle spasm, to provide greater therapeutic benefits and a shorter rehabilitation period than any single antirheumatic-antiarthritic agent.

MEPROLONE-2 is indicated in cases of severe involvement, yet often leads to a reduction of steroid dosage because of its muscle-relaxant action. When involvement is only moderately severe or mild, MEPROLONE-1 may be indicated.

SUPPLIED: Multiple Compressed Tablets in three formulas: MEPROLONE-2—2.0 mg. prednisolone, 200 mg. meprobamate and 200 mg. dried aluminum hydroxide gel (bottles of 100). MEPROLONE-1 supplies 1.0 mg. prednisolone in the same formula as MEPROLONE-2 (bottles of 100). MEPROLONE-5—5.0 mg. prednisolone, 400 mg. meprobamate and 200 mg. dried aluminum hydroxide gel (bottles of 30).

a

Because muscles move joints, both muscle spasm and joint inflammation must be considered in treating the rheumatic-arthritic patient . . .



MERCK SHARP & DOHME Division of MERCK & CO., INC., Philadelphia 1, Pa.

heumatoid Arthritis

tip compressed tablets

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FIST MEPROBAMATE-PREDNISOLONE THERAPY



b

MEPROLONE is the one antirheumatic-antiarthritic that exerts a simultaneous action to relax muscles in spasm and to suppress joint inflammation...



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Therefore, MEPROLONE does more than any single agent to help the physician shorten the time between disability and employability.

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- **functional:** full-view test tube always in place
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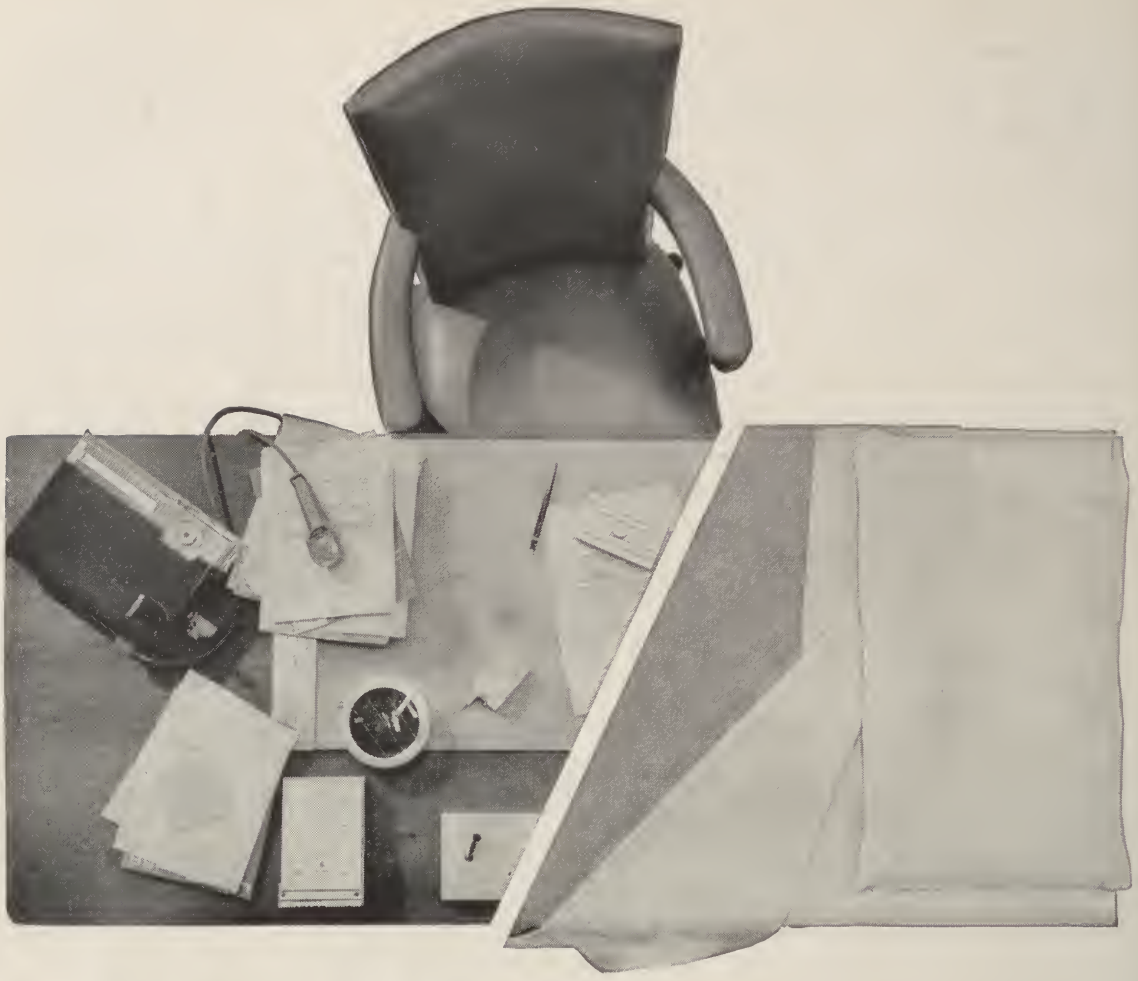
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For all-day (or all-night) therapeutic effect with a single oral dose: 'Compazine' Spansule† capsules. Also available: Tablets, Ampuls, Multiple dose vials, Syrup and Suppositories.

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Symposium on Diabetes

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VOLUME 56 • NUMBER 10 • OCTOBER 1958

in amenorrhea . . .

HIGHLY EFFECTIVE CYCLIC THERAP

NORLUTIN

(norethindrone, Parke-Da

In gynecological disorders amenable to progestational therapy, clini effects of injected progesterone can now be produced by small oral do of NORLUTIN. In amenorrhea, for example, 10-20 mg. daily for 5 day after estrogen priming—will induce "...a prompt temperature rise a withdrawal bleeding 24-72 hours after medication is stopped."[1]

CASE SUMMARY[2] Amenorrhea of four years' duration in a 24-year-old marri woman. A course of 10 mg. NORLUTIN, twice daily for five days, was follow after three days by menses. When no spontaneous menstruation occurred duri the following 35 days, this treatment was repeated and again induced mens Using ethisterone, similar results were unobtainable in this patient.

INDICATIONS FOR NORLUTIN: conditions involving deficiency of progesterone such primary and secondary amenorrhea, menstrual irregularity, functional uterine bleedi endocrine infertility, habitual abortion, threatened abortion, premenstrual tension, a dysmenorrhea.

PACKAGING: 5-mg. scored tablets, bottles of 30.

REFERENCES: (1) Greenblatt, R. H., & Jungck, E. C.: *J.A.M.A.* 166:1461 (Mar. 22) 1958. (2) Hertz, Waite, J. H., & Thomas, L. B.: *Proc. Soc. Exper. Biol. & Med.* 91:418, 1956.

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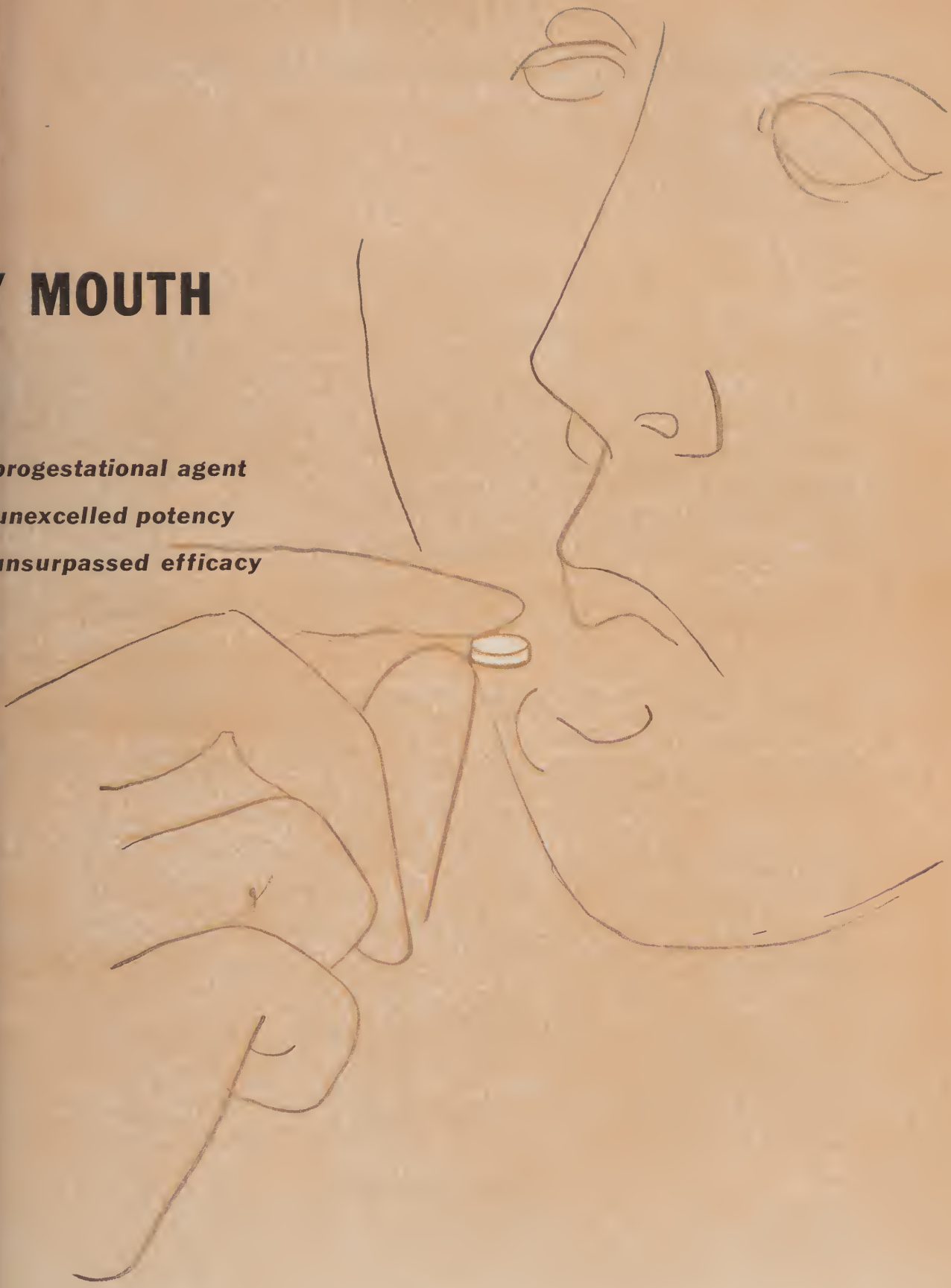
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progestational agent

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unsurpassed efficacy



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why all the fuss over potassium?



Many physicians will recall when safe but potent organomercurials were first introduced. At the time there was considerable worry about possible potassium loss. Patients were instructed to take foods rich in this mineral, and not infrequently potassium supplements also were advised. After enough experience was gained, it became evident that only the exceptional case could lose enough potassium to be concerned about. And with oral organomercurial diuretics this was practically never a problem.

Why revive the subject now? Because clinical experience with nonmercurial diuretics indicates most of them have such a specific effect on potassium that with their use very real problems must be faced. Enough potassium loss can lead to digitalis toxicity or to a classical overt hypopotassemia. Since a fair percentage of cardiacs who receive diuretics are also digitalized, this excess potassium excretion is clinically serious. Clinical experience is still too limited with some nonmercurial diuretics to say just how often such loss will occur—but warnings already have been sounded by some clinical investigators as to the need for potassium supplementation.

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message from the President

AS your new president, I first want to thank each and every member of the Association for the great honor bestowed on me. I know I have a task before me that will not be easy. The poverty of my qualifications will make this task more difficult without the help of you who are more experienced and better qualified. Your advice and loyal support will be greatly appreciated. I approach with humility the position you have rendered me, and hope to see my best intentions mature into actions during the coming year.

Since Hippocrates, the medical profession has grown from bloodletting and leeching to transfusions; from mysterious potions to highly complex antibiotics and now radioactive therapies. The way we practice this year, may be somewhat obsolete next year. Therefore, every doctor is constantly challenged to new study and growth. But with this rapidly changing social science, we cannot discard those ethics of medical practice that we have held most dear for generations. For me and my contemporaries it has been a good life of service, as well as a profitable one.

Whether the factors or factions at work to alter the ways of medical practice are benign or malignant, we must fight any such changes. But I do feel that patient negotiation is necessary to help bring a happier solution to the problems that arise.

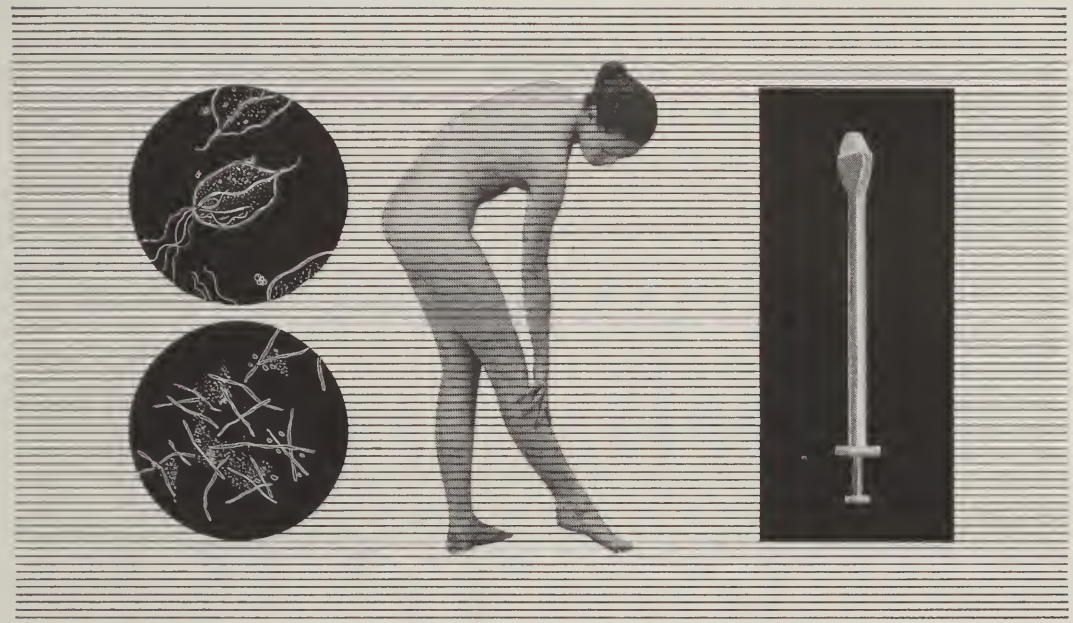
My able and honorable predecessor Doctor Edward Mersch has been a man of vision and foresight and the good work he has done as president will make my term of office less difficult and more pleasant.

To the Woman's Auxiliary, I extend my best wishes during the coming year. The Auxiliary has lent grace and strength to the administration of this Association.

If the year ahead needs a test—let us take it from the opening words of our code of ethics: "The principal objective of the medical profession is to render service to humanity with full respect for the dignity of man."

Robert W. Robertson

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IN THE BOOKS



Books Received

A DOCTOR SPEAKS HIS MIND: by Roger I. Lee, M.D., published by Little, Brown & Company, Boston.

HUMAN PARTURITION: by Norman F. Miller, M.D., et al; published by Williams and Wilkins Co., Baltimore, Md.

IDEALS IN MEDICINE: edited by Vincent Edmunds, M.D., and G. Gordon Scorer, M.D., published by the Christian Medical Society, Chicago, Ill.

INFECTIOUS DISEASES OF CHILDREN: by Saul Krugman, M.D., and Robert Ward, M.D., published by C. V. Mosby, St. Louis.

NEGROES AND MEDICINE: by Dietrich C. Reitzes; published for the Commonwealth Fund by the Harvard University Press, Cambridge, Mass.

RETICULAR FORMATION OF THE BRAIN: by Herbert H. Jasper, M.D., et al; published by Little, Brown and Company, Boston.

GYNECOLOGIC AND OBSTETRIC PATHOLOGY, WITH CLINICAL AND ENDOCRINE RELATIONS: by Emil Novak, M.D., and Edmund Novak, M.D., published by W. B. Saunders Company, Philadelphia and London, 1958; 650 pages, price, $14.

This fourth edition of Gynecologic and Obstetric Pathology is the last one ever to be compiled by the outstanding gynecological pathologist, Emil Novak, because of his death on February 3, 1957. This great teacher wrote a half dozen books (his Textbook of Gynecology is used in all but four of the nation's medical schools), was the author of over 200 articles on Gynecology, and delivered innumerable lectures before local, county, state, national and international medical societies. He was the best known gynecologist in America.

Of all of Doctor Novak's efforts, this book remains his best. It describes the pathological anatomy of the known gynecological diseases, both gross and microscopic, beginning with the vulva, and continuing with the vagina, cervix, endometrium, myometrium, tubes and ovaries. The strange and various malignant tumors, the questionably malignant, and the carcinoma-in-situs are described with a clarity that makes this book the standard of the Specialty. Especially the hormone effects are detailed, of which Doctor Novak was the authority. The section on hydatidform mole, chorioma destrens and chorion epithelioma is the most accurate of our time.

Two chapters on the placenta by Dr. R. E. L. Nesbitt, Jr., now Professor of Obstetrics and Gynecology at Albany Medical College, is written with clarity and knowledge of the subject. Another new chapter on exfoliative cytology by Dr. J. K. Frost, in charge of the Cytology Laboratory at the Johns Hopkins Hospital, is well written and most informative.

While pathology changes very little, those new developments in the literature in the past six years, since the 3rd edition, have been added. Future editions of this work will be carried on by the able son, Doctor Edmund R. Novak, and Doctor Novak's successor in the Hopkins Gynecological Pathology Laboratory, Dr. Don Woodruff.

The popularity of textbooks changes in a few years' time, but this book, which is the standard of gynecological pathology today, and which is of great value to every physician who treats the diseases of women, will remain an important reference book for very many years to come. This is a wonderful achievement to have left behind.

Laman A. Gray, M.D.

YOU CAN INCREASE YOUR HEART POWER. By Peter J. Steincrohn, M.D., F.A.C.P., published by Doubleday and Company, Inc., Garden City, New York, 1958; 381 pages, price, $4.95.

The American Public has become increasingly aware of the high mortality and morbidity produced by heart disease. This has created marked apprehension among many people with heart disease as well as many people who have normal hearts. It is important for the heart patient to have an understanding of his ailment in order to take better care of himself. It is equally important for the individual who has normal heart but fears that he has heart disease to have this fear dispelled before he develops a "cardiac neurosis."

This book has been written for the lay public by an author who believes that "a little knowledge is not dangerous but potentially life-saving." The author is a nationally syndicated columnist and author of many popular medical books for laymen. This book is based on letters written to the author regarding multiple aspects of heart disease. Many of these letters followed by his answers to them are used to illustrate his theme. This book includes discussion of various types of heart disease, cholesterol levels, exercise, smoking, drinking, overweight, underweight, fatigue, weather and its effect upon the heart, high blood pressure and the role of the family doctor.

The book is well organized and well written. There could be little disagreement with the author's basic philosophy in the management of cardiac patients or patients in general. Many good points are brought forth on doctor-patient relationship. The therapeutic value of the doctor who is a good "listener" is emphasized.

The layman with or without heart disease should not concern himself with the many cardiac problems discussed in this book. The family doctor or cardiologist is in the best position to answer the questions of a patient who is worried about his heart, and for this reason, I would recommend this book for the practicing physician, intern, and resident, and, perhaps the selected layman, but not for the layman in general.

Henry W. Post, M.D.

(Continued on Page 948)

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(Continued from Page 946)

CLINICAL ENZYMOLOGY: by Gustav J. Martin, Sc. D.; published by Little, Brown and Company, Boston, Mass.; 1958; illustrated; 241 pages; price, $6.

Although entitled "Clinical Enzymology" this book is written primarily by basic scientists in a complicated field. The book is divided into seven chapters. The first three chapters have to do with the chemistry and biochemistry of enzymes. Much of the material set forth here is highly theoretical.

These sections are written by biochemists and physical chemists. The portions of these chapters relating molecular size to pharmocological properties (especially toxicity) and the author's "theory of biological relativity," are presented in a technical background. The biochemistry of various enzymes including chymotrypsin, trypsin, streptokinase, ribonuclease, hyaluronidase and cholinesterase also is presented, including discussions of the various serum enzyme inhibitors.

The chapter on "Parenteral Use of Enzymes in Medicine" includes the use of trypsin in thrombotic and inflammatory processes primarily.

A section on diagnostic uses of enzymes is of interest. Among these the more familiar secret in test for amylase and pancreatic secretions is re-examined in the diagnosis of chronic pancreatitis. Additional enzymatic studies in the diagnosis of pancreatic disease described in this chapter include elevated antithrombin levels and the trypsin sensitized clotting test. The fecal lysozyme content as an index of the degree of tissue involvement in ulcerative colitis is examined critically. The value of testing for acid and alkaline phosphatase levels in prostatic and bone disease is also discussed. Some of these tests are of clinical significance, others at present are possibly diagnostic research tools.

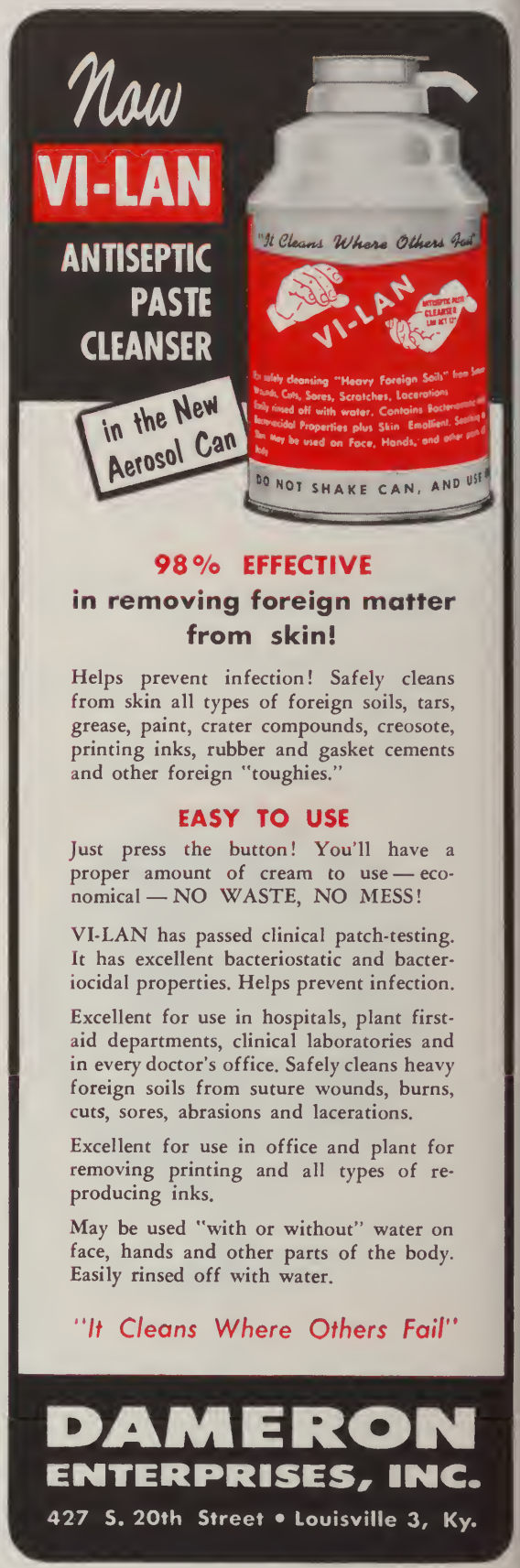
A chapter on polymerases and macromolecules in biological systems considers the theory that the macromolecule is the central component of the living system. The three biologically important macromolecular groups include proteins, nucleic acids and carbohydrates. Physical and geometrical variations in macromolecules of these groups of compounds are determinants of the colloidal state.

The colloidal state is the "milieu of life." The degree of polymerization of these macromolecules determines permeability, diffusion, structural components, viscosity and other physical factors. Centrally located in this complex system is the polymerase—depolymerase, the enzyme controlling the sol-gel state.

The degree of polymerization and therefore the activity of the polymerase-depolymerase system is the probable answer to aging, to collagen diseases and to arteriosclerosis. According to the author clinical enzymology is primarily dedicated to the control of the macromolecular state.

This book can be recommended as a reference manual and to those interested in an insight into some fundamental problems and theories in the field of enzymology. This reviewer believes however, that it will be found of more limited value to those seeking the "clinical" approach.

Robert S. Tillett, M.D.



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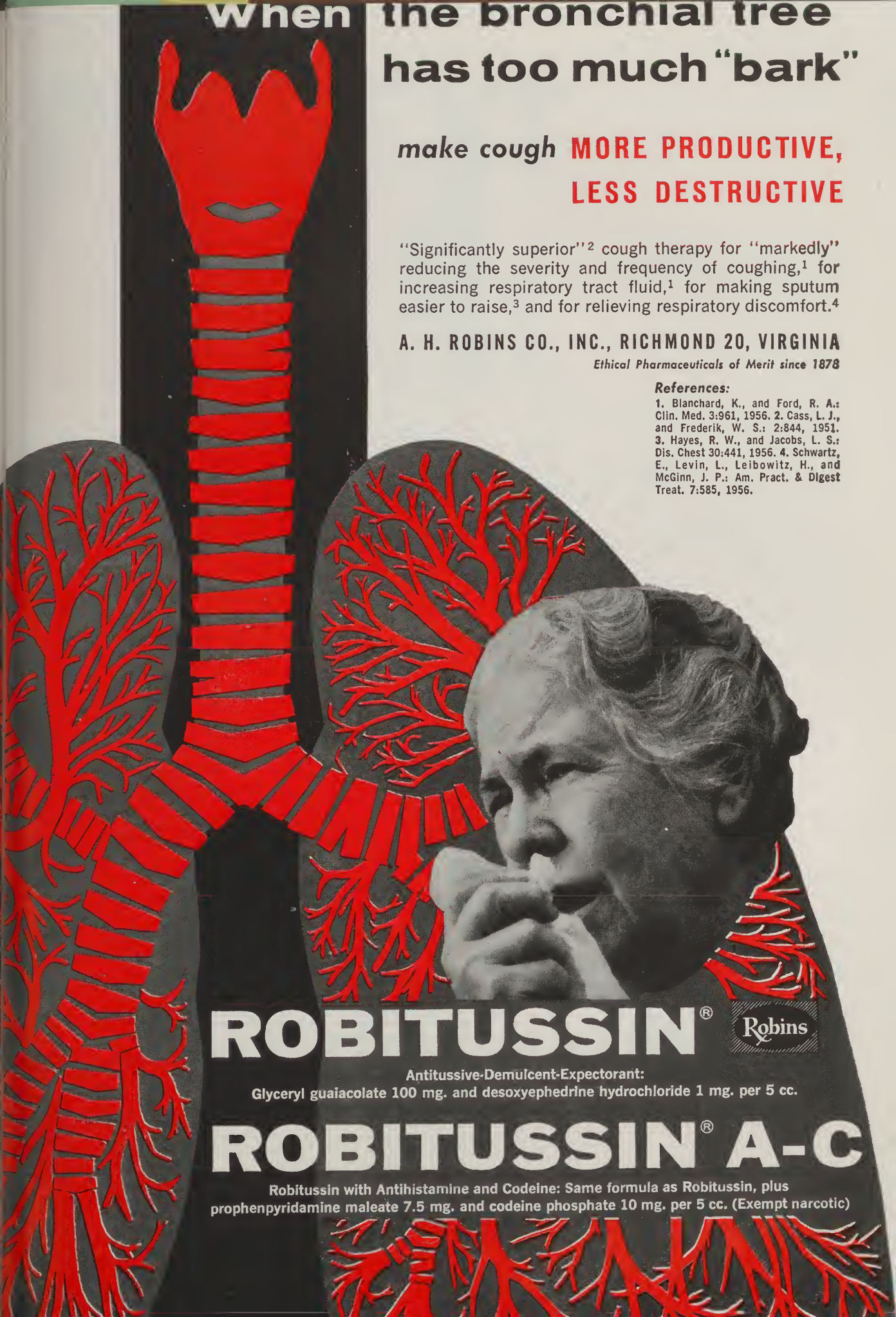
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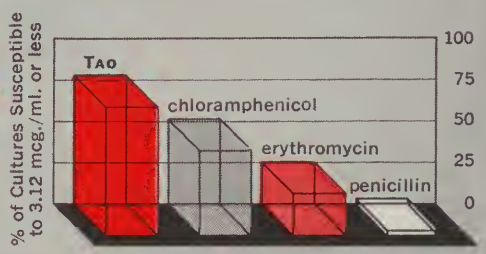
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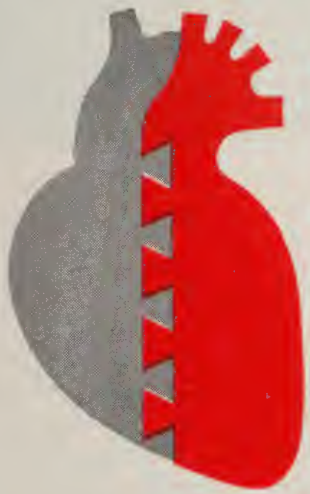
Dosage and Administration: Dosage varies according to the severity of the infection. For adults, the average dose is 250 mg. q.i.d.; to 500 mg. q.i.d. in more severe infections. For children 8 months to 8 years of age, a daily dose of approximately 30 mg./Kg. body weight in divided doses has been found effective. Since Tao is therapeutically stable in gastric acid, it may be administered at any time, without regard to meals.

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For clinical supply and literature, write Dept. 44A

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glucosamine potentiated tetracycline with nystatin

antibacterial plus added protection against monilial superinfection

CAPSULES (black and pink) 250 mg. Cosa-Tetracyn, (with 250,000 u. nystatin)

ORAL SUSPENSION 125 mg. per tsp. (5 cc.) Cosa-Tetracyn, (with 125,000 u. nystatin), 2 oz. bottle

COSA-TETRACYDIN*

glucosamine potentiated tetracycline-analgesic-antihistamine compound

For relief of symptoms and malaise of the comm cold and prevention of secondary complicatio

CAPSULES (black and orange) Ea. capsule contain Cosa-Tetracyn 125 mg. • phenacetin 120 mg. • caffei 30 mg. • salicylamide 150 mg. • buclizine HCl 15 m

REFERENCES: 1. Carlozzi, M.: Ant. Med. & Clin. Therapy 5:146 (Feb.) 1958. 2. Welch, H.; Wright, W. W., and Staffa, A. W.: Ant. Me & Clin. Therapy 5:52 (Jan.) 1958. 3. Marlow, A. A., and Bartlett, G. R.: Glucosamine and Leukemia. Proc. Soc. Exp. Biol. & Med. 84:4 1953. 4. Shalowitz, M.: Clin. Rev. 1:25 (April) 1958. 5. Nathan, L. A.: Arch. Pediat. 75:251 (June) 1958. 6. Cornbleet, T.; Chesrow, E and Barsky, S.: Ant. Med. & Clin. Therapy 5:328 (May) 1958. 7. Stone, M. L.; Sedlis, A., Bamford, J., and Bradley, W.: Ant. Med. Clin. Therapy 5:322 (May) 1958. 8. Harris, H.: Clin. Rev. 1:15 (July) 1958.

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PUBLIC HEALTH PAGE

Death Registration – A Valuable Process

RUSSELL E. TEAGUE, M.D.
Commissioner of Health, Commonwealth of Kentucky

BEREAVED relatives often find themselves in urgent need of a legally recorded statement pertaining to the facts of a death in the family. In this case, a death certificate is the primary source of information which, in many cases, is needed quite soon after death. Then too, death certificates serve as the basic source in mortality statistics and studies which are, of course, of utmost importance to medical and health organizations.

The data are used for determining the significance of specific diseases as causes of death; for determining the impact of these diseases in various areas; for measuring the need for medical help and hospital services; and for evaluating trends and progress in the prevention and control of diseases.

Kentucky Statutes require that every death in the Commonwealth be registered by the State Department of Health. As an original step, the Funeral Director must file a completed death certificate with the Local Registrar and secure a permit before he can legally bury a dead body. He must initiate a certificate by securing and entering the personal facts required and then take the certificate to the physician last in attendance.

The physician is then required to complete the medical certification of the cause of death. The most important feature of the certification form is its emphasis on the underlying cause as determined by the attending physician. Thus, the physician has both a heavy responsibility and a great opportunity to make mortality statistics reflect the true frequencies of the underlying causes of death. The physician cannot always know by instinct, however, what detail is required by the statistical office for the purpose of classification. Both the International Classification of Diseases (1955 Revision) and Standard Nomenclature of the American Medical Association are excellent aids in assisting the physician to provide a more appropriate description. Of course, the State Department of Health welcomes any inquiries in this regard.

Of interest is the fact that there is no requirement in any state that specifies that the attending physician actually see the body after death before certifying a natural death. There is no place on the death certificate where the physician actually states he saw the patient dead. This common practice of certifying death without seeing the body, while no doubt accurate in the majority of cases, could result in gross inaccuracy in certain other cases. However, we feel that if the physician must indicate he saw the body after death, it might very well hinder the physician's effectiveness in reporting.

There are numerous situations where medical certification of causes of death are not processed by the physician.

From fifteen to twenty per cent of all deaths in Kentucky are being reported as Coroner's cases. In such instances, they are to be investigated by the duly elected County Coroner who ascribes the cause of death and signs the certificate. While registration practices vary in detail from one state to another, nearly every state requires a medicolegal authority, either the Coroner or the Medical Examiner, to certify the cause of death in the following instances:

1. When violence is known or suspected to be the underlying cause of death;
2. When the cause of death is unknown;
3. When the deceased has not received medical attention within a stated period prior to death;
4. When the identity of the deceased is unknown.

Physicians will be interested to know that the Kentucky Coroner's Law was amended in 1956 to provide a salary for the coroner on the basis of the county's population, and further, the law was amended in 1956 to read as follows: "If death occurs without the attendance of a physician, at least thirty-six hours prior to the death, the Coroner shall investigate and hold an inquest in the county where the death occurs."

It requires a little imagination to realize the need is fast developing for full-time Medical Examiners to supplant or supplement county coroners. The medicolegal autopsy is a highly specialized type of autopsy and should be performed by a pathologist, especially trained in the field of Forensic Pathology. Most pathologists, even those certified by the American Board of Pathology, are trained in hospitals and along research lines, but are often reluctant to become connected with what may become a medicolegal case.

Kentucky was admitted to the U. S. Registration For Deaths in 1912, and current tests have shown that we have registered better than 98% of all deaths occuring. Quantity registration is certainly to be commended, however, there is room for improvement in listing of death causes. Particular efforts are currently being concerted to improve death reporting when your cancer, heart disease and perinatal deaths are involved. It is our firm conviction that quite valuable data is being provided, and with improved reporting, this information could be made even more valuable to those of us concerned.



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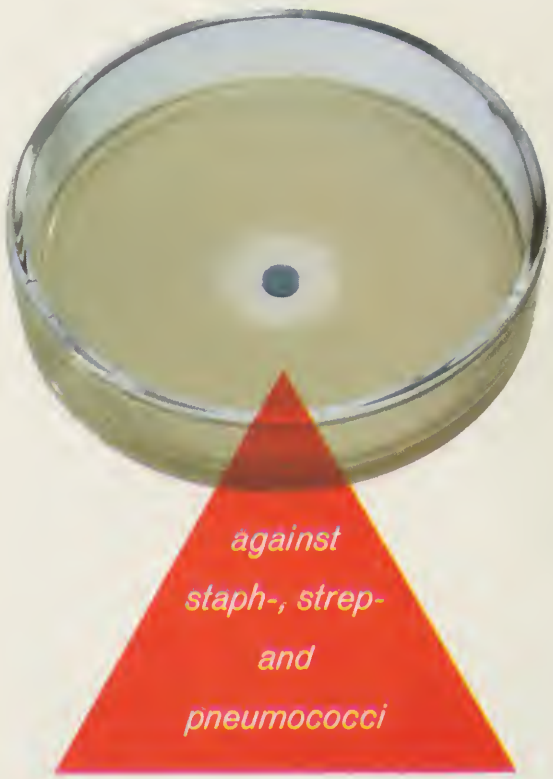
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stearate

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dosage:

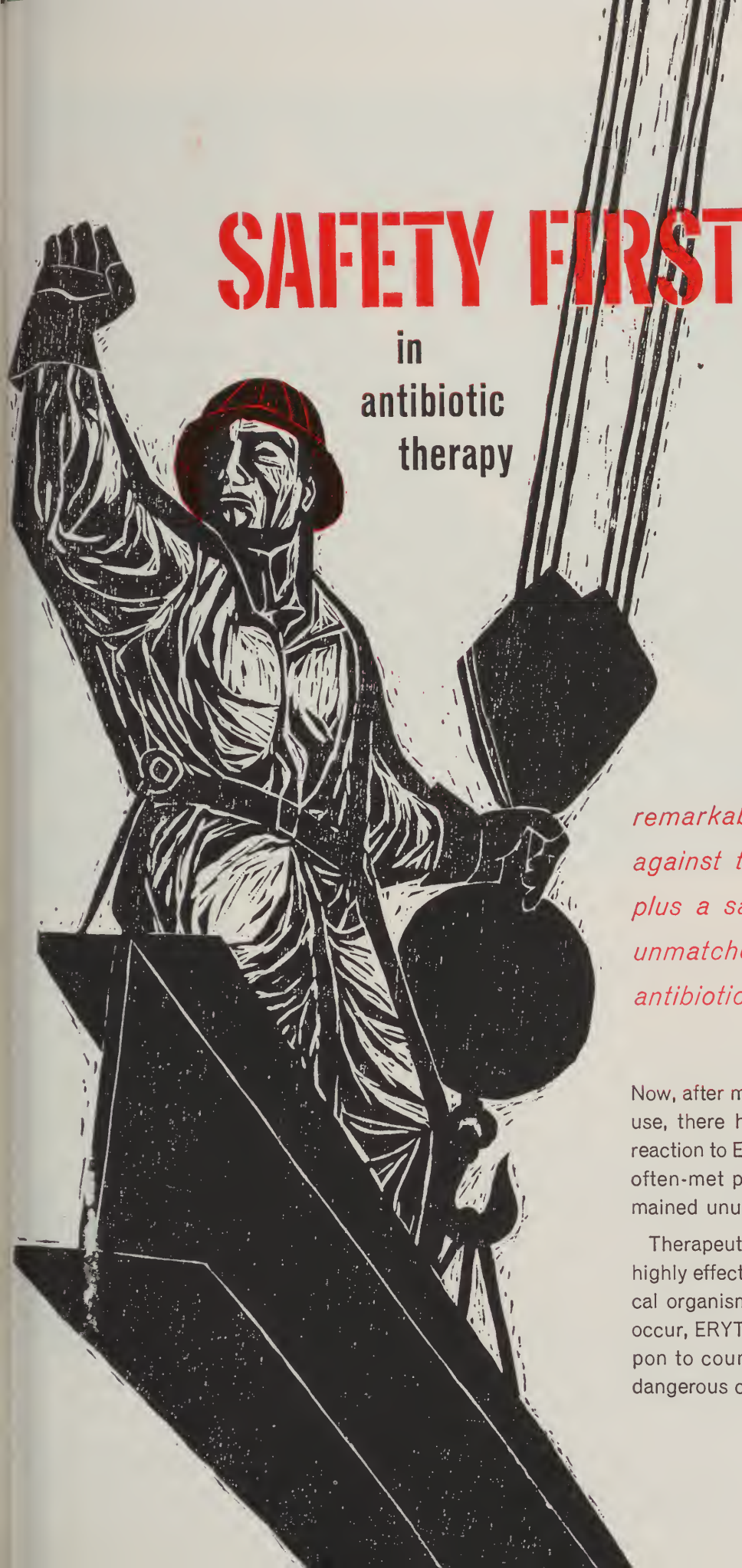
Usual adult dose is 250 mg. every six hours; for severe infections, usual dose is 500 mg. every six hours. Child's dose may be reduced in proportion to body weight.

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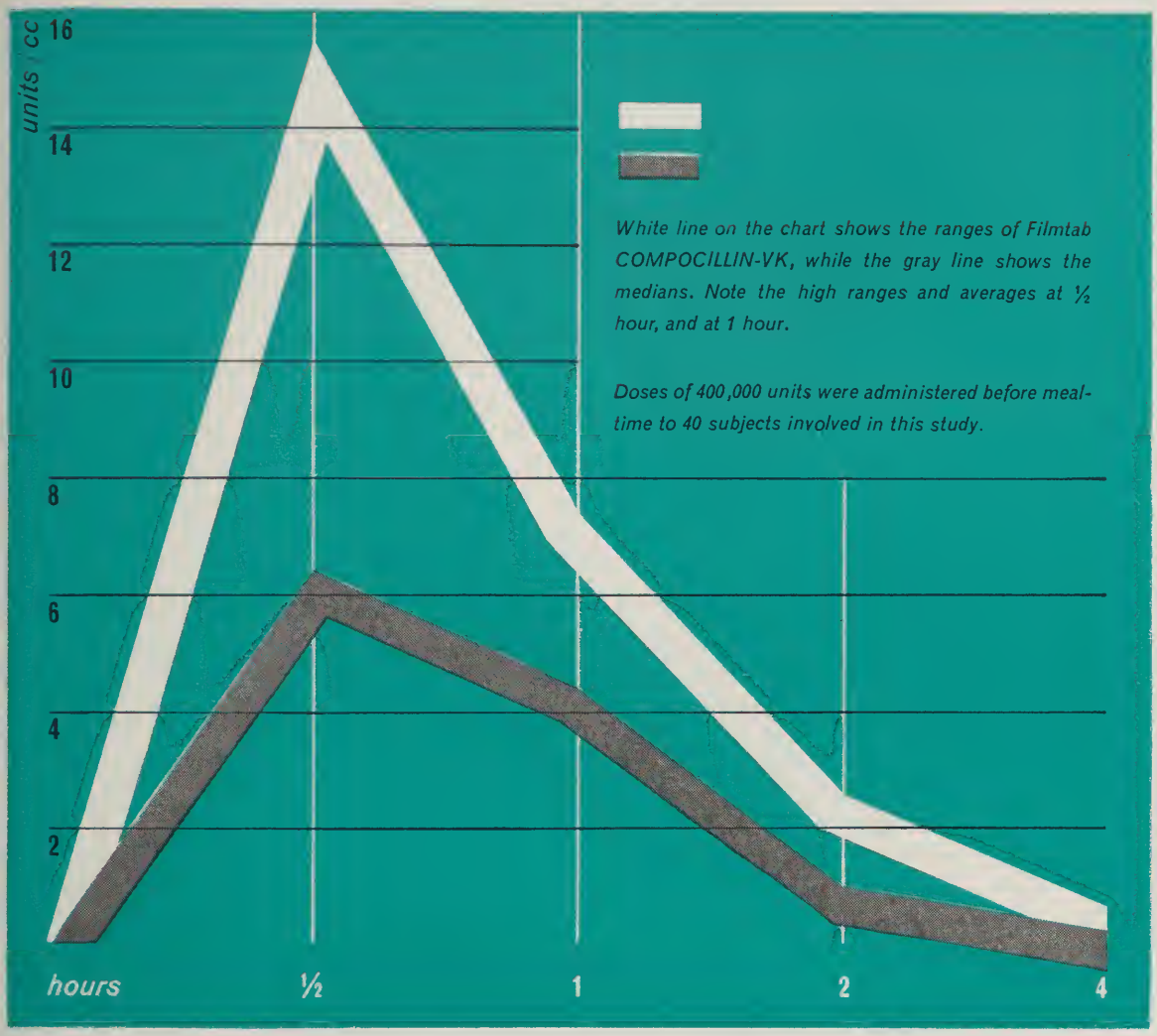
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Indications:

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Dosage:

Depending on the severity of the infection, the usual adult dose is 125 to 250 mg. (200,000 to 400,000 units) every four to six hours. For children, dosage may be reduced in proportion to body weight.

Supplied:

In Filmtabs, representing 125 mg. (200,000 units) of potassium penicillin V, bottles of 50 and 100. In 250 mg. (400,000 units), bottles of 25 and 100.

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streptococcal, pneumococcal ar
enterococcal infections. A drug of choi
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organisms that resist all other antibiotic

dosage:

Administered intravenously. In pneum
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usually be adequate. Majority of staph
lococcal infections will be controlled l
25 to 50 mg./Kg. per day. It is recor
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[...]ow, after almost a year, SPONTIN has proved [...] be an exceptionally valuable agent for treating [...]erious coccal infections.

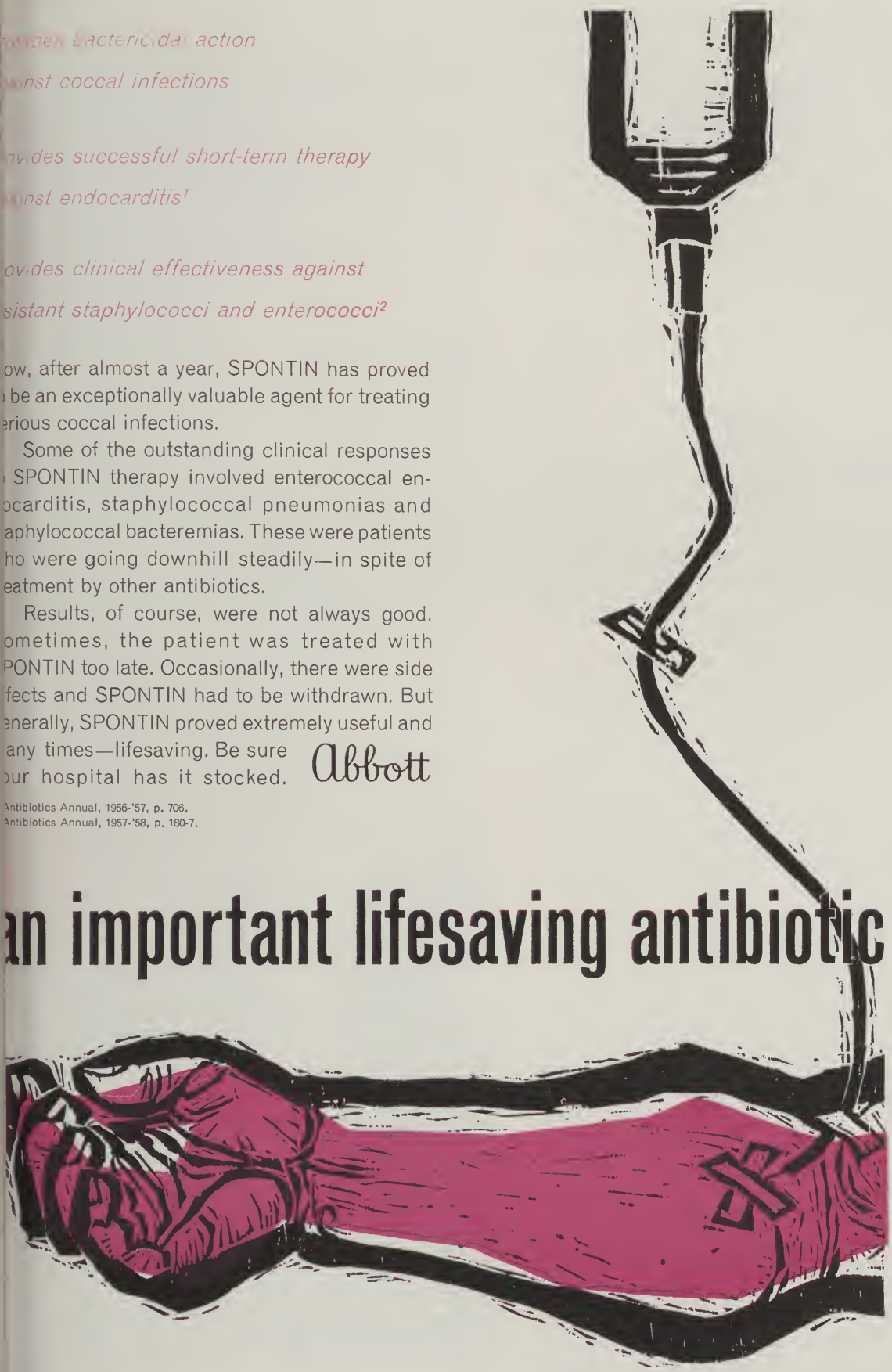
Some of the outstanding clinical responses [...] SPONTIN therapy involved enterococcal en[...]ocarditis, staphylococcal pneumonias and [...]aphylococcal bacteremias. These were patients [...]ho were going downhill steadily—in spite of [...]eatment by other antibiotics.

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[...]Antibiotics Annual, 1956-'57, p. 706.
[...]Antibiotics Annual, 1957-'58, p. 180-7.

[...]an important lifesaving antibiotic



From the Files of the

Committee for the Study of Maternal Mortality

CASE No. 7: A 33-year-old gravida 6 para 5 was seen initially in her third month of pregnancy. Her estimated date of confinement was August 23, 1957.

The pregnancy was uncomplicated and uneventful until June 9, 1957, on which date she was hospitalized because of vaginal bleeding. A tentative diagnosis of placenta praevia was made, and the patient was treated conservatively. The bleeding ceased and she was dismissed from the hospital after having been apprised of the potential serious nature of her complication and urgently advised to report promptly any recurrence of bleeding.

On June 16, 1957, bleeding recurred and the patient was rehospitalized. Again the bleeding ceased and after a few days she was discharged. The blood picture was satisfactory and there had not been sufficient bleeding to require transfusion. Again she was advised to promptly report any further bleeding.

On July 15, 1957 the patient awakened her husband at 5:45 a.m., stating she had been bleeding since 12:45 a.m. and that it was now very profuse. According to her, she did not rouse her husband or call her physician sooner because she did not want to go to the hospital again.

At the time of admission to the hospital, bleeding was continuing, fetal heart was audible, and the cervix was reported as being 3½ to 4 fingers dilated with the placenta covering the os. There was no compatible blood in the hospital's blood bank. Considerable delay occurred in obtaining blood from another hospital. No definitive therapy was instituted until the blood was started. It was then elected to deliver the patient vaginally. Breech extraction was performed, penetrating the placenta, and, according to the physician, delivery of a 5 lb. 11 ounce stillborn male was accomplished quite easily. Cyclopropane anesthesia was used.

Immediately following delivery, massive hemorrhage occurred. The uterus was packed and bimanual compression maintained for 45 minutes. The patient's blood pressure dropped to 70 systolic, the blood was given under pressure and other fluids begun by cutting down on a vein. The pack became saturated and bleeding occurred through the packing. Fibrinogen was administered and the patient prepared for laporotomy. Levophed was given, but the blood pressure remained at shock level. Hysterectomy was performed under cyclopropane anesthesia.

Urinary output was negligible, the condition of the patient failed to improve and after progressive deterioration, she expired 29 hours post partum. During the 29 hours, she received 7 units of blood, two units of Dextran and 3000 cc. of other fluids. The usual drugs for stimulation were given and all measures for shock were utilized.

The pathologist in describing the uterus grossly reported a cervical laceration extending 3½ cm. up the lateral portion. Grossly, it appeared recent because of the absence of cicatricial tissue and the presence of hemorrhage in the serosa. A large vessel was present and patent. The microscopic examination, however, described the laceration of the cervix as old. Many large vascular channels were described by the pathologist. The final diagnosis was 1. Irreversible shock due to massive hemorrhage from the uterus, 2. Central placenta praevia, 3. Acute nephrosis.

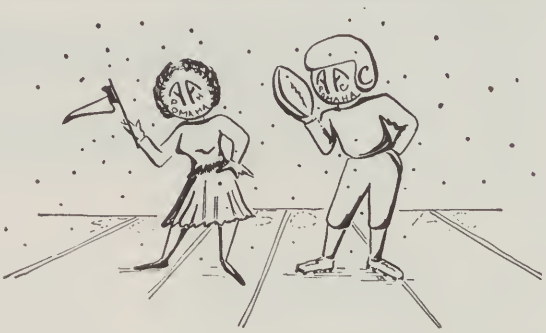
Comment

All committee members agreed that this was a direct obstetric death—probably preventable. All agreed that had the patient called her physician promptly upon recurrence of bleeding, the course of events may have been altered. This tragic case demonstrates the necessity of having adequate blood of all types available at all times.

Some discussion ensued as to the difficulty of delivering a 5 lb. 11 ounce baby through a 3½ to 4 finger dilated cervix without producing severe laceration. It was conceded, however, that a multiparous cervix is extremely wieldy, and the judgment of the physician was not criticized. There may have been undetected cervical laceration from which the fatal hemorrhage occurred or such uterine inertia developed due to shock that muscular contraction of the myometrium failed to produce hemostasis in the large uterine sinuses. The hysterectomy was a heroic measure, but unfortunately, even after the hemorrhage was arrested, shock was irreversible.



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WASHINGTON NEWS DIGEST



WASHINGTON, D.C.—When the Congress that is elected in November goes to work next January 7 it will have before it a half dozen important health-medical issues that the last Congress took some interest in but didn't resolve. They include hospitalization under social security, tax-deferment on annuities, loans and mortgage guarantees for hospitals and nursing homes, aid to medical schools and amendment of Veterans Administration's hospitalization procedures.

The issue of hospitalization under social security —the Forand bill principle — will come into the spotlight shortly after the new session starts. Under instructions from the House Ways and Means Committee, the Department of Health, Education, and Welfare will complete a study on the problems of financing hospital care for the aged before next February 1. Some study of medical costs may also be included.

Decision to move ahead with a study of medical care costs for the aged was reached by the committee at the same time it excluded the Forand idea from the social security bill enacted during the summer. HEW was told to pay particular attention to the possibility of increasing OASI taxes, and with the money purchasing health insurance (nonprofit or commercial) to take effect upon retirement or disability. This would differ from the Forand plan in that health care would be financed through insurance, and not paid for directly by the Federal government.

The Keogh bill to allow doctors and other self-employed to defer income taxes on money put into retirement funds passed the House with very little opposition, but encountered difficulty in the Senate. It was defeated there in the closing days, and under unusual circumstances. Policy committees of both parties decided to oppose the bill as too costly, and the vote came in the course of a complicated legislative maneuver that could not be used as a test of whether individual Senators favored or opposed the bill itself.

Keogh bill sponsors, however, are encouraged that 32 Senators resisted official party instructions and stayed with the pension plan. They are confident that next year under more favorable legislative circumstances the measures will clear the Senate.

An effort was made late in the session to authorize grants to medical schools for building and equipping teaching as well as research facilities. The bill extending the research grants program also would have allowed use of the grants for "multi-purpose" structures (teaching and research) if emphasis were on research. However, for fear this change would hold up the simple extension bill, it was dropped off before the bill reached the House floor. Sponsors of aid to medical education will be back next year and campaign on this issue alone.

Legislation for U. S. guarantee of nursing home mortgages, strongly supported by the American Medical Association, fell by the wayside in the House during the closing hours of the session, after having cleared the Senate with no trouble whatever. This also will be pushed next year, and may have a better chance of passage because of the growing emphasis on need for solving the problems of the aged.

Far too late for passage, Chairman Olin Teague's House Veterans Affairs Committee reported out a bill that would make a number of changes in VA hospitalization procedures, liberalizing some and tightening up on others. The bill also would require VA to open 5,000 beds over which Mr. Teague and VA Administrator Whittier have been squabbling for months, the latter maintaining that the beds aren't needed. That issue still is unresolved, inasmuch as the bill didn't pass.

Congress did roll out a sizeable list of medical-health laws. It ordered the calling of a 1961 White House Conference on the Aging, gave Food and Drug Administration authority to enforce its pre-testing standards on foods to which chemicals and other substances have been added, authorized loans as well as grants under the Hill-Burton program, authorized grants for the country's schools of public health and for civil defense purposes, raised military and VA physicians' pay, and required labor and management health and welfare plans to make reports and open up their books for inspection by members.

American Medical Association was able to persuade the Department of Defense and the administration to retain the post of Assistant Secretary (health and medical) in the reorganization of the department. In legislation passed by Congress to bring about the reorganization, one of the assistant secretary posts would have been eliminated, and the medical assistant was marked for down-grading. However, Secretary McElroy eventually announced that the position would be continued.

Even before Congress adjourned, it was clear that trouble was in sight for Medicare because of inadequate appropriations and instructions from Congress not to exceed the appropriation. To keep within the limitation, if possible, Defense Department was channelling many thousands of service families to military facilities, and at the same time limiting the scope of care permitted in civilian facilities.

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PUBLISHED REFERENCES: 1. Carpenter, E. B.: Southern Medical Journal 51:627, 1958. 2. Forsyth, H. F.: J.A.M.A. 167:163, 1958. 3. Little, J. M., and Truitt, E. B., Jr.: J. Pharm. & Exper. Therap. 119:161, 1957. 4. Morgan, A. M., Truitt, E. B., Jr., and Little, J. M.: J. Am. Pharm. Assn., Sci. Ed. 46:374, 1957. 5. O'Doherty, D. S., and Shields, C. D.: J.A.M.A. 167:160, 1958. 6. Park, H. W.: J.A.M.A. 167:168, 1958. 7. Truitt, E. B., Jr., and Patterson, R. B., Proc. Soc. Exper. Bio. & Med. 95:422, 1957. 8. Truitt, E. B., Jr., Patterson, R. B., Morgan, A. M., and Little, J. M.: J. Pharm. & Exper. Therap. 119:189, 1957.

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CONDITION	NO. PATIENTS	RESPONSE			
STUDY 1[1]		"marked"	moderate	slight	none
Skeletal muscle spasm secondary to acute trauma	33	26	6	1	—
STUDY 2[2]		"pronounced"			
Herniated disc	39	25	13	—	1
Ligamentous strains	8	4	4	—	—
Torticollis	3	3	—	—	—
Whiplash injury	3	2	1	—	—
Contusions, fractures, and muscle soreness due to accidents	5	3	2	—	—
STUDY 3[5]		"excellent"			
Herniated disc	8	6	2	—	—
Acute fibromyositis	8	8	—	—	—
Torticollis	1	—	—	1	—
STUDY 4[6]		"significant"			
Pyramidal tract and acute myalgic disorders	30	27	—	2	1
TOTALS	138	104 (75.3%)	28 (20.3%)	4	2

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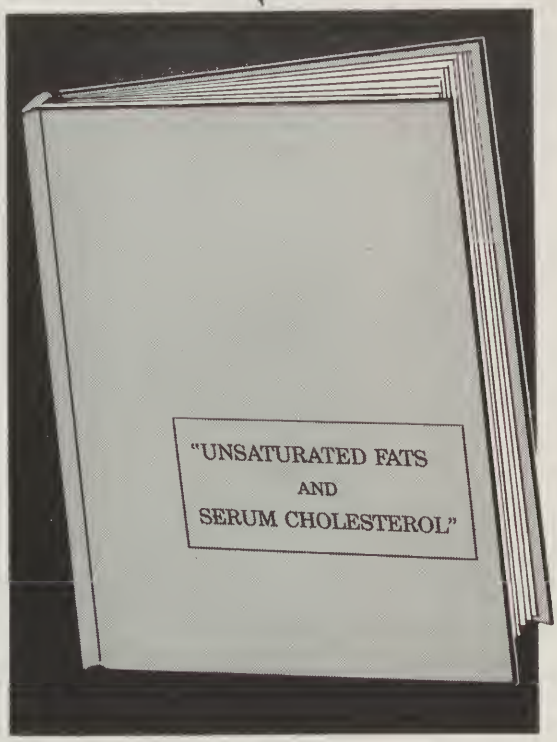
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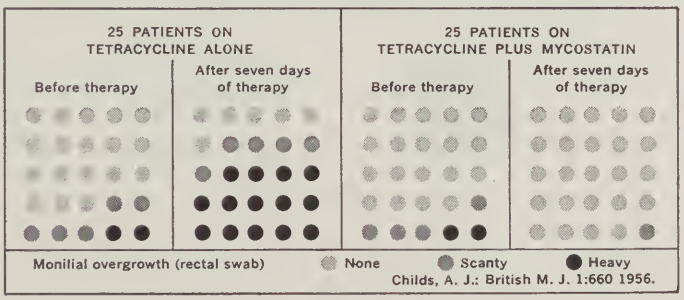
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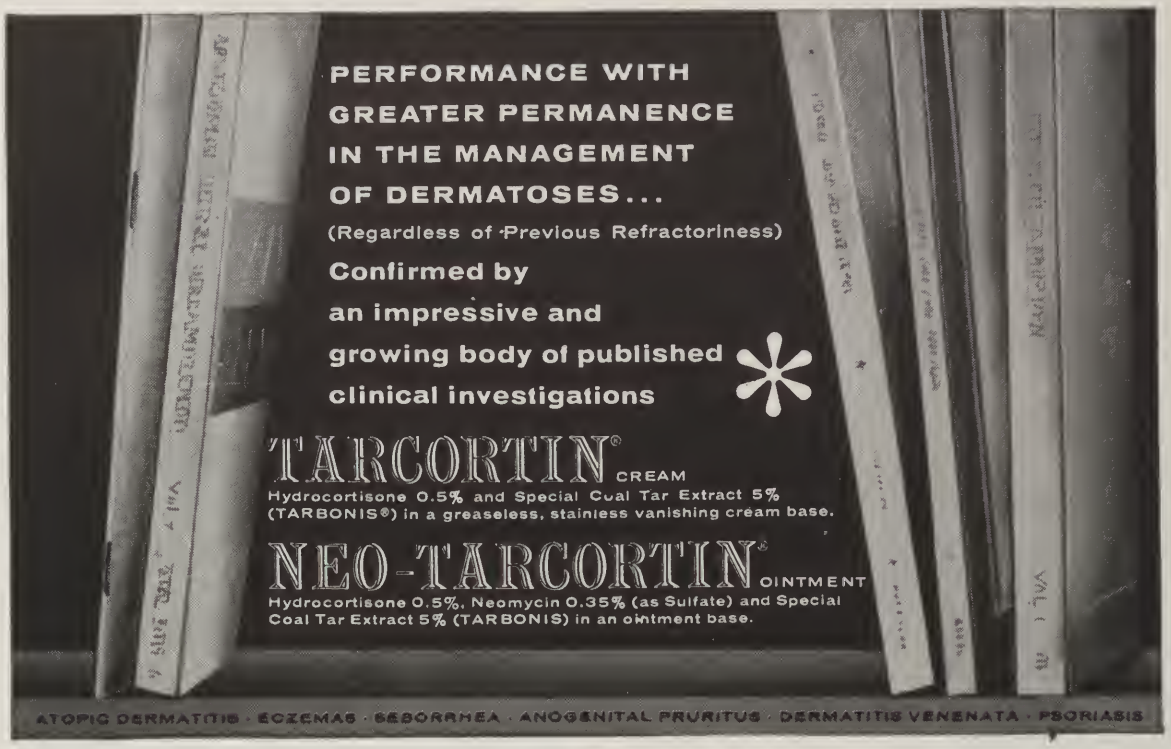
Childs, A. J.: British M. J. 1:660 1956.

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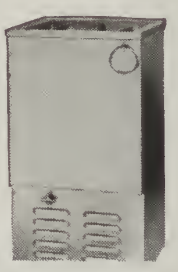
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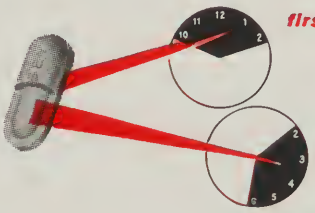
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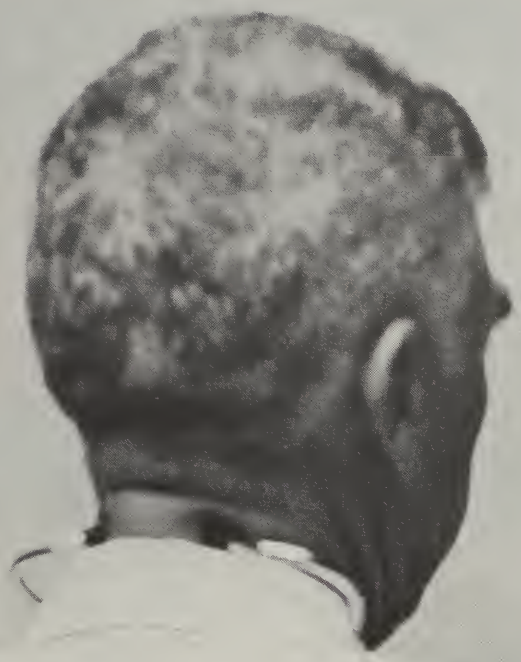
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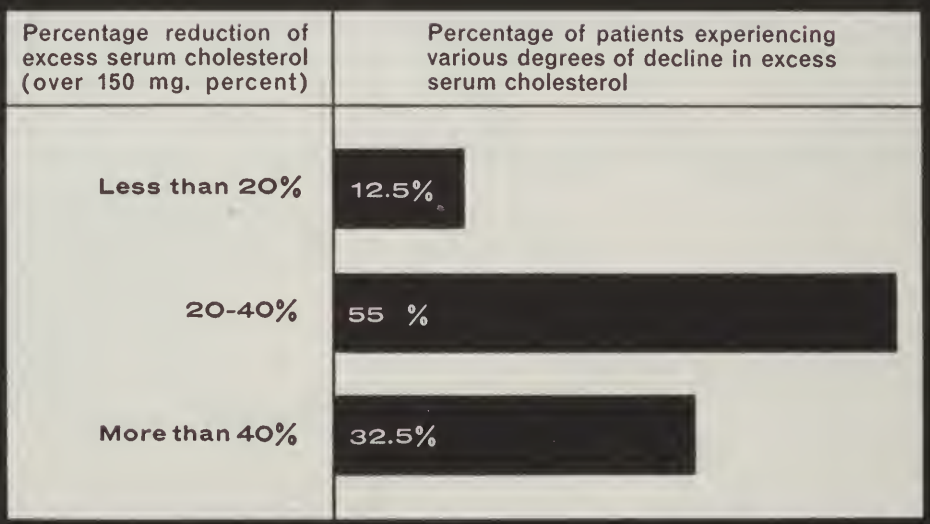
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Symposium on Diabetes

Diabetic Detection Drive: The Results And Their Implications

ROBERT J. HOFFMANN, M.D.*
South Fort Mitchell, Kentucky

THE introduction of insulin in 1921 must be considered one of the major contributions to medicine. The use of insulin has altered and improved the management of diabetes and increased the life expectancy of diabetics. However, it has not greatly decreased the morbidity of diabetes. That the use of insulin has increased the number of living diabetics is a clearly established fact. While the death rate from diabetes has been declining, the incidence of this disease has been increasing.

It is interesting that the highest mortality rate in diabetics in the United States, 26 persons per 100,000, occurred in 1940, nearly twenty years after the introduction of insulin. In 1957 the death rate declined to 16 persons per 100,000; however, there were 27,000 deaths due to diabetes during that year and the disease ranked seventh as a cause of death. It is estimated that the number of living diabetics in the United States has risen from approximately 666,000 to 1,000,000 during the past two decades and that there are another 1,000,000 undetected cases of diabetes.

It is further estimated that 1 of every 80 individuals in this country is diabetic and that there are more than 4,000,000 potential diabetics. Recent studies indicate that there are approximately 25,000 living diabetics under age 20 (juvenile diabetics), 2,000 of whom are less than 5 years of age (preschool). It should be emphasized that these figures are estimates and may be altered by data obtained from a recently completed national health survey.

*Chairman of KSMA Associate Committee on Diabetes.

This is the first annual symposium issue of the Journal of the KSMA. It was authorized by the Editor and his Advisory Committee, as a special service to readers. Wallace E. Herrell, M.D., Lexington Clinic, Lexington, Ky., is Special Symposium Editor.

The above figures emphasize the importance of the Diabetic Detection Drive as sound preventive medicine. Although diabetes cannot be cured, it can be controlled. The disease can be detected by an inexpensive and simple screening test, a determination of sugar in the urine. Since diabetes can be detected by such a simple procedure, should we not exert our greatest possible efforts toward the detection of this disease? It is true, of course, that diabetes can be detected in patients by their physicians. Unfortunately, however, many patients do not present themselves to their physicians for periodic examinations. This is another important reason for supporting the Diabetic Detection Drive.

Another result of the Diabetic Detection Drive is the good public relations that accrue to organized medicine. The importance of strengthening good public relations cannot be overemphasized at this time, when organized medicine is being subjected to considerable political and economic pressure. Your Kentucky State Medical Association, by means of a newspaper clipping service, collects data on the type and amount of publicity received by various activities of the Association. The amount of publicity given the Diabetic De-

tection Week in both daily and weekly publications is enormous and probably exceeds that given any other event associated with the State Medical Association.

Diabetes is not a reportable disease. Only the deaths caused by it are reported. The Diabetic Detection Drive, therefore, offers us a method of obtaining accurate statistics concerning the true incidence of this disease, which otherwise can only be estimated.

Diabetic Detection Drives in Kentucky

It seems appropriate here to evaluate the results of previous Diabetic Detection Drives in Kentucky. The first such drive authorized by the Kentucky State Medical Association was in 1951. Unfortunately, the decision to sponsor this drive was made late, the drive was not well organized, and the statistics that resulted from it were meager. During that drive, 11,136 urine tests were done and only 74 new cases of diabetes were found.

From 1952 through 1957 well-organized yearly drives were sponsored by the State Medical Association, as a result of which considerable data is now available. During that six-year period a total of 234,475 free urine tests were done and 930 new cases of diabetes were discovered. The data collected from these six yearly drives are summarized in table 1. It is gratifying that the number of free urine tests done increased from 24,576 in 1952 to 52,483 in 1957. The number of tests done during the intervening years varied somewhat, depending on the success of the drives.

TABLE 1

Year	Number of free urine tests	Number of new diabetics	Case finding rate*
1952	24,576	169	145
1953	35,384	228	155
1954	43,975	184	238
1955	36,964	122	302
1956	41,093	90	456
1957	52,483	137	383

**One new diabetic per number of tests.*

It is interesting that the year 1953 yielded the greatest number of new diabetics. That year ranked fifth from the standpoint of the case finding rate. In the beginning it was thought that the case-finding rate should be more or less constant. However, experience has shown that it varies with the size of the sampling and the type of the group tested. For example, if a large number of school children are tested, the percentage or the case-finding rate will decline. Conversely, it will increase if large groups of women or Negroes are tested. The case-finding rate for the six-year period in Kentucky was 1 new diabetic for every 252 urine tests, or approximately 4 per 1,000. The expected rate for the nation is approximately 7 or 8 per 1,000. This suggests that either the rate of diabetes in Kentucky is about one-half the national rate or the Diabetic Detection Drives in this state have not been as successful as those elsewhere. There is reason to suspect that the latter is true. Probably the chief reasons for this are lack of accuracy in collecting and reporting data and lack of uniformity in the groups tested. If these factors can be corrected, future Drives should yield more accurate results. This, of course, will be accomplished only with the full cooperation of the medical profession throughout Kentucky.

Some interesting facts are evident from a study of data collected during the six-year period from 1952 through 1957 (figure 1). Of 120 counties in Kenucky, 11 never have participated in a Drive or at least have submitted no official report concerning their activities. Five counties have participated in only one drive. Only 24 counties, regrettably, have reported results of the Diabetic Detection Drive each year during this six-year period. This fact offers a great challenge to Kentucky physicians and to the Diabetic Committee of the Kentucky State Medical Association. County participation has been improving each year. For example, in 1952, 63 counties participated, while in 1957, 83 counties partici-

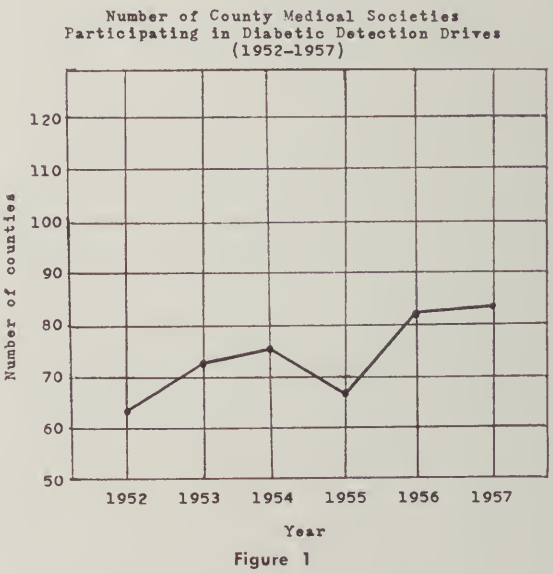


Figure 1

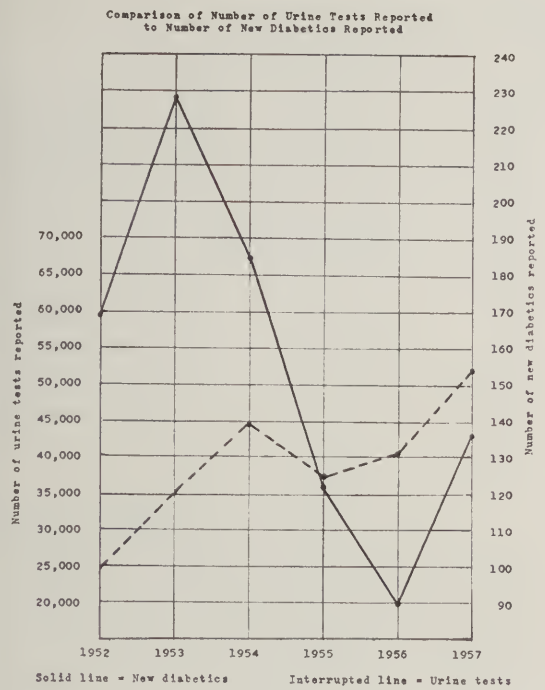


Figure 2

pated. It is the earnest desire of the Diabetic Committee that all counties take part in future Drives.

In figure 2 is shown a comparison of the percentage of new diabetics reported per number of urine tests reported during the years 1952 through 1957. It is evident that there is little, if any, correlation between the number of tests reported and the number of new diabetics reported. Perhaps the chief reason for this is the lack of uniformity in reporting the data. It is hoped that in future Drives more accurate data will be obtained if total participation of all counties and greater accuracy and uniformity in reporting results can be attained. In the future the State Diabetic Committee will continue to use the small return postcard for reporting results of the Drive. The Committee urges that the following minimal information be reported: (1) The total number of tests done, (2) the number of physicians participating, and (3) the number of new diabetics found. It would be very helpful if the new diabetics discovered could be grouped according to their ages—0 to 20, 20 to 40, and 40 to 80 or over.

The Role of the County Medical Societies

A successful Diabetic Detection Week can be held in every county. The president of each county medical society should appoint a committee, with a chairman who has a genuine interest in the project. It also will be helpful if the chairman has had previous experience in this type of undertaking, although this is of lesser importance than that he be keenly interested in the project. The size of the committee should be proportionate to the population and the area involved. In those counties which have had no previous Drive, great effort should be made to have a good one. Counties which have had Drives in the past should strive to have better ones.

The Kentucky State Medical Association and the American Diabetic Association are eager to aid in any way possible those counties which have had little or no previous experience. Those associations will procure testing materials and also supply news releases for the local radio and press. The auxiliary medical associations of the local hospitals and health departments are happy to assist in the project. Local pharmacies are ideal places for displays which publicize the Drive, also make excellent collection centers for urine samples, and often are willing to transport these samples to the testing laboratories. Civic, religious, fraternal and educational groups are willing to help with the Drive. Physicians who are members of the local society often are able to contact members of these groups and stimulate their interest in the Drive. It is an established fact that the success of a Diabetic Detection Week is directly proportionate to the amount and quality of publicity it obtains.

Finally, diabetes lends itself well to mass detection drives. The cost, per case found, in Diabetic Detection Drives is far below that of any other mass detection drive, such as those for tuberculosis and cancer. Diabetic Detection Drives are controlled almost completely by the practicing physicians; the success of such drives depends upon their wholehearted support. The Diabetic Detection Drive is a very important activity of the Kentucky State Medical Association.

The Diabetic's Diet And His Income

John H. Willard, M.D., Ann Hains, and Eleanor Eccleston*
Harlan, Kentucky

THE major considerations in successful dietotherapy of diabetes are the willingness and the ability of the patient to procure the proper foods. Fortunately, the diabetic diet is more quantitative than qualitative, which permits a wide range of food selection, provided the patient understands exchange or substitution lists or provided he can be given a basic diet that utilizes foods he will and can procure. Patients in the higher income group can purchase a variety of foods, which aid in providing a more palatable diet; however, it is possible for individuals of limited means to follow a less palatable but satisfactory regimen. We propose to discuss some of the problems encountered in the dietary management of diabetics with restricted incomes and to outline some methods of dealing with these problems.

Successful dietotherapy depends on a number of factors, namely, the patient's acceptance of the importance of the regimen, his knowledge of the purpose of the diet and properties of foods, and his willingness to fit his dietary requirements into the eating habits of his family and community. A diet must then be formulated within the purchasing power of the family group. Dietary surveys have clearly shown that food is the item that takes the greatest proportion of the family budget in low and moderate income groups.

The Household Food Consumption Survey by the United States Department of Agriculture in 1955[1] revealed certain facts concerning the amount of money spent for food by different population groups, which should be of interest to those who prescribe diets. Small, rural, non-farm families with an annual income of below $2,000 to $4,000 spent 30 to 40 per cent of their income for food. Only slightly more was spent by large families with similar incomes. Food costs were found to be somewhat greater in similar urban families. The actual money spent for food by farm families of similar size was considerably less. The value of foods produced at home was two to three times that of rural, non-farm families and approximately eight times that of urban families. Figures from the United States Department of Agriculture report are shown in table 1.

The availability of foods in various groups may be quite different, depending on the amount of money to be spent, the seasonal foods available, and the foods produced at home. Any prescribed diet that is not sufficiently adjustable to permit a wide choice of foods will discourage or prevent patients from adequately following instructions.

Local Food Purchasing

Although no detailed data on food purchasing in southeastern Kentucky are available, we have obtained information from interviews with patients and employees which indicates certain trends. This information is summarized in table 2. Eating habits in this area have been in force for many years and, in many instances, for generations, and are influenced also by the natural sources of supply. These factors have led to considerable difficulty in obtaining the patient's cooperation when any radical change in dietary habits was suggested. The principle aim of dietotherapy has been to establish methods of instruction that would permit the use of available and customary foods in filling dietary requirements. In many instances, the patient's inability to read has required the use of methods of instruction that do not rely on written or printed material. Repeated actual demonstration of foods and household food measurements to be used in substitution or exchange lists often is necessary.

Methods of Instruction

Much groundwork must be done before a patient can begin adjusting his diet successfully. He must understand the reason for an importance of his diet. This requires some knowledge of diabetes and its complications. The patient must be taught the different food substances, namely, carbohydrates, proteins, fats and vitamins. Finally, he must be given a basic diet and told methods of food substitution and exchange. In general, three methods of instruction have been used:

1. General instruction may be given by the physician, nurse or dietitian and supplemented by written or printed lists or books. In many areas this method may be quite satis-

*Chief of Medicine (Doctor Willard), Director of Nutrition (Miss Hains), and dietitian (Miss Eccleston), Harlan Memorial Hospital.

TABLE 1

	Avg. income after taxes	Spent weekly for food	Obtained without direct expense		
			Total	Home Prod.	Gift, etc.
RURAL NON FARM:	Under 2,000	15.19	4.00	2.42	1.59
3 Member Families	2000-2999	22.60	3.00	1.49	1.51
	3000-3999	22.88	3.64	2.70	.94
	6000-7999	30.79	1.98	1.83	.15
7+ Member Families	Under 2000	18.78	5.34	2.83	2.51
	2000-2999	28.38	5.05	3.56	1.49
	3000-3999	34.52	6.80	6.00	.81
	6000-7999	66.96	.41	..	.41
URBAN	Under 2000	19.89	1.85	..	..
3 Member Families	2000-2999	25.27	.76	..	..
	3000-3999	26.58	.90	..	..
	6000-7999	34.30	.78	..	..
7+ Member Families	Under 2000	36.20	2.76	..	..
	2000-2999	33.21	.58	..	..
	3000-3999	37.52	2.03	..	..
	6000-7999	52.54	.21	..	..
RURAL—FARM:	Under 2000	12.72	10.52	9.67	.85
3 Member Families	2000-2999	16.57	10.93	10.06	.87
	3000-3999	19.42	8.36	2.86	.50
	6000-7999	19.97	8.09	7.07	1.03
7+ Member Families	Under 2000	16.59	12.66	11.32	1.34
	2000-2999	26.29	16.64	15.49	1.16
	3000-3999	28.38	16.77	15.86	.90
	6000-7999	30.81	19.00	18.71	.30

Modified from Food Consumption of Households in the U. S. Food Consumption Survey, 1955, Report #1, U. S. dept. of Agriculture, Table 2.

TABLE 2

Food Purchases in Low and Moderate Income Groups in Southeastern Kentucky

	Low	Moderate
Meat, fish, etc.	Large quantities of salt pork, bacon, sausage, dried navy and pinto beans. Smaller quantities of pork chops, chicken, liver, frankfurters, ground beef, cheese and eggs.	Moderate quantities of salt pork, sausage, bacon, dried navy and pinto beans. Larger quantities of pork chops, chicken, liver, ground beef, frankfurters, cheese and eggs. Small quantities of beef roast, ham, steaks and oysters.
Vegetables and Fruits	Large amounts of potatoes. Fresh cabbage, carrots, lettuce, okra, onions, apples, oranges, and bananas all year round. Fresh greens, especially turnip, mustard and spinach, corn, green beans, peaches and strawberries when in season. Canned turnip and mustard greens, spinach, corn, green beans, tomatoes during the winter.	Smaller amounts of potatoes. Fresh cabbage, carrots, lettuce, celery, onions, tomatoes, apples, oranges, bananas all year round. Fresh greens, especially turnip, mustard and spinach, corn, green beans, acorn and crookneck squash, grapefruit, melons and grapes in seasons. Canned or frozen turnip and mustard greens, spinach, corn, green beans and tomatoes during the winter.
Milk, etc.	Evaporated and non-fat dry milk for cooking. Fluid milk for drinking.	Evaporated milk, etc.
Bread, flour and cereals	Large quantities of cornbread, biscuits, oatmeal, dry cereals and macaroni.	Large quantities of cornbread and biscuits. Smaller amounts of oatmeal, dry cereals and macaroni.

Many have gardens supplying cabbage, lettuce, potatoes, tomatoes, green beans, corn, carrots and beets during the spring, summer and early fall. Tomatoes, tomato juice, sauerkraut, corn and beets are canned for the winter. Green beans are canned or dried. As strawberries, peaches and apples are relatively inexpensive when in season, these are purchased in quantity and put up for use during the winter. The existence of numerous lakes and streams enables most families to supplement their diet with fish during spring and summer. Large quantities of lard are consumed for biscuits, cornbread and frying. Frequent meals consist of vegetables only. Gravy is used frequently for all meals, including breakfast, on biscuits as well as potatoes. Syrup, especially honey, is used commonly. Carbonated beverages, store cookies, sweets of all kinds are used in large amounts.

factory for most patients. However, in some instances, lack of understanding of the principles of the diet and methods of substitution may result in serious failure unless the instructions are more individualized.

2. Repeated interviews with a trained dietitian are highly desirable. However, this may not prove practicable after the patient has been discharged from the hospital, due to the time required of the dietitian.

3. Group instruction, which has proved of value in many phases of medicine (neuropsychiatry, prenatal clinics, obesity clinics, et cetera), also may be employed in the treatment of diabetes. The physician and the dietitian can discuss problems of diabetes and dietotherapy with several patients together, resulting in great saving of time and, often, the development of considerable enthusiasm and improved morale. Many questions are brought up in group discussions which might not be in individual interviews, and solutions are sometimes presented by the patients themselves. Information regarding eating habits and available foods also is furnished to the dietitian.

Group Instruction

Early in 1958 it became apparent that the methods of instruction outlined above in items 1 and 2 were not producing satisfactory results in our hospital. Most patients had been standardized on a diabetic regimen while in the hospital. However, when they reported to the outpatient clinic, it was evident, from weight changes, glycosuria and hyperglycemia, that many of them had failed to maintain control following their dismissal from the hospital. It was decided, therefore, to institute group classes in connection with the weekly diabetic clinic. During the interval between drawing the blood sample for determination of the fasting blood sugar and the individual interview with the physcian, the patients were assembled in a conference room. Since most of the patients returned at monthly intervals, four weekly groups were seen each month and were given the same instructions. At the beginning of the hour a physician discussed informally and in simple terms some phases of diabetes, including the nature of the disease, its control and possible complications, the importance of diet and weight control, the use of insulin and hypoglycemic drugs (including possible side-reactions), the care of the feet, and details concerning technics of insulin injection and use and care of syringes and needles.

Following the physician's discussion, the dietitian spent approximately 45 minutes discussing diabetic diets. Three class periods were devoted to an explanation of an adequate diet and instruction regarding the values of various foods. Particular emphasis was placed on food groups that have similar values, permitting substitutions. Exchange lists in the manual published by the American Diabetes Association and American Dietetic Association[2] provided the basis for this presentation. Accurate food measurements were demonstrated, using samples of the least expensive and most readily available, as well as best accepted, foods in the area. The fourth period for each group was spent outlining diets actually prescribed for patients attending the class. The patient's food preferences were considered, and his diet was composed of foods generally used in his home.

It was learned that patients were more likely to adhere to their diets if their usual daily routines were disturbed as little as possible. Simpler alternative meal plans were devised and demonstrated repeatedly for those patients who for any reason could not use the exchange lists. In some instances other members of the patient's family were urged to attend the classes in order that they might learn to assist the patient with his diet at home. In discussing diets with patients with limited incomes, the relative costs of foods always must be considered. Although prices may vary with locale and season, certain general principles can be followed. Helpful suggestions in this regard are shown in table 3, which was prepared by Johnson.[3]

Our experience with the above program, although limited, is sufficient to warrant certain observations. Both the physicians and the dietitians believe that group instruction has proved more effective than the methods previously used in our hospital. Further experience is needed in the development of technics of instruction for certain patients. It is hoped that in the future more instructions can be passed on by the patients themselves in the group discussions. Most patients appear to enjoy the classes, and many have expressed their appreciation of this additional assistance.

Summary

Successful dietotherapy of diabetics with limited incomes presents many problems, the greatest of which is their adequate instruction. It is essential that these patients in the lower

TABLE 3

Characteristics of Adequate Diets at Four Levels

	Restricted	Low	Moderate	Liberal
Estimated cost per week for family of four (school age children)	$17.50	$21.50	$26.00	
Meat, poultry, fish, eggs, dry beans and peas, nuts	Very small quantities of meat, poultry, fish and eggs Lower grades and cheaper cuts Inexpensive variety meats Much larger amounts of dry beans and peas, lentils	Small quantities of meat, poultry, fish, eggs Lower grades and cheaper cuts Inexpensive variety meats Large amounts of dry beans and peas, lentils	Larger quantities of meat and eggs Some higher priced meats	Larger quantities of meat and eggs Higher grades, more expensive cuts
Leafy, green, yellow vegetables, citrus fruits, tomatoes	Cheapest fruits and vegetables in season More potatoes Canned tomatoes or juice when citrus fruits are high Canned citrus juices when cheaper than fresh fruit Cheaper grades of canned products	Lower priced fresh fruits and vegetables in season More potatoes	Fresh fruits and vegetables in season A few out-of-season foods	More variety in fresh fruits and vegetables Use of more expensive and out-of-season ones
Milk, milk products	Evaporated and non-fat dry milk when cheaper than fluid milk	Evaporated and non-fat dry milk when cheaper than fluid milk		
Bread, flour, cereals	Much larger quantities Cereal products as extenders No expensive ready-baked items	Larger quantities Cereal products as extenders No expensive ready-baked items	Smaller quantities	More expensive ready-baked items
Other characteristics	Much home preparation of food Food served at home Fewer foods in one meal with larger servings of these	Home preparation of food Food served at home Fewer foods in one meal with larger servings of these	Some ready-to-serve and partially prepared foods A few meals eaten away from home More items in one meal	More ready-to-serve and partially prepared foods More meals away from home

income group understand the principles of exchange lists, which will permit use of seasonal foods, foods produced at home, and foods consumed by the rest of the family. Purchase of special foods usually is not necessary and can result in undue hardship. The food consumption survey by the Department of Agriculture in 1955 indicated that food represented the largest single item in the budget of low and moderate income groups, being proportionately much higher in those with low incomes. Therefore, it is very important that the food-dollar be wisely spent by those with small budgets.

Methods of instruction must be adjusted to meet individual requirements. In many instances the use of printed material and periodic interviews is not adequate. In our experience, group instruction classes have proved of great value under such circumstances. In certain instances special teaching technics are required. Although generalizations can be made concerning food purchases, more specific advice requires consideration of the eating habits of the family and the availability of various foods. There is seldom any need for specially prepared "diabetic" foods in the management of this group of patients. There is a great need for further development of effective methods and technics for instruction.

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Oral Hypoglycemic Agents: Their Uses And Limitations

Warren H. Diessner, M.D.*
Middlesboro, Kentucky

THE introduction of oral hypoglycemic agents is probably the most important advance in the treatment of diabetes mellitus in the past few years. Through the use of these new drugs, it appears that a great many diabetics will be spared the inconvenience of insulin injections in the treatment of their disease. The fact that there are an estimated 4,750,000 potential diabetics now living makes the magnitude and importance of this development apparent. It should be emphasized that, like insulin, these new hypoglycemic agents control, rather than cure, diabetes. Dietary and other measures commonly used in the treatment of this disease remain essential elements in its successful control.

The development of the new hypoglycemic agents undoubtedly began with the observation reported by Loubatieres in 1942 that patients who received sulfonamide compounds showed a hypoglycemic response resembling that seen following the administration of insulin. Interest in the possible hypoglycemic action of the sulfonamides was further stimulated in 1955, when Fuchs published the first report of the results of the clinical use of sulfonylurea in diabetes.

Subsequently, many sulfonamide compounds were reported to cause a lowering of the blood sugar level. One of these, 1-butyl-3-sulfanilylurea (Carbutamide†), was made available for clinical trial in the treatment of diabetes in 1955. This drug definitely produced hypoglycemia. However, approximately 5 per cent of patients who received it developed mild toxic reactions, including skin rash, drug fever and leukopenia. Later reports indicated that this drug at times caused impairment of liver and renal function, as well as suppression of the bone marrow. Because of these reactions of toxicity, the preparation was withdrawn from use in 1956.

Subsequently, another compound, 1-butyl-3-p-Tolylsulfonylurea or tolbutamide (Orinase‡), became available. This hypoglycemic agent now has been used in the treatment of well over one-quarter of a million diabetics. The structural formulas of sulfanilamide and tolbutamide may be compared in figure 1.

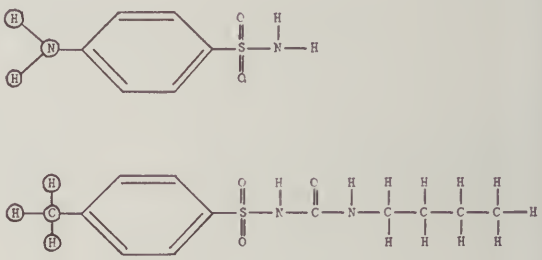


Figure 1
Structural formulas for sulfanilamide (above) and tolbutamide (below)

Since a CH_3 group replaces the NH_2 group, tolbutamide is not strictly a sulfonamide compound and, incidentally, has no antibacterial activity. Although not a form of insulin, tolbutamide apparently stimulates the beta cells of the pancreas to produce insulin.

Experiments in dogs have clearly showed that there is a direct release of insulin from the pancreas following the administration of tolbutamide. It follows, therefore, that the purpose of the administration of this drug to patients is to improve their potential for the production and liberation of insulin. It is believed to act only through indigenous insulin, either by causing its secretion or preventing its destruction. Patients whose pancreatic islands contain no insulin do not respond to tolbutamide lower the blood sugar in a similar manner—by inhibiting output of liver glucose.

Clinical studies to date indicate that 70 to 80 per cent of adult diabetics can successfuly utilize tolbutamide. Excellent therapeutic results are obtained most often in patients who became diabetic after the age of 40 years. It would appear that in many diabetics tolbutamide, as compared with insulin, results in smoother control of the disease and a more marked feeling of general well-being. Tolbutamide is less likely than insulin to increase the appetite, so that weight reduction in obese di-

*Chief of Clinical Services, Middlesboro Memorial Hospital.

†*Carbutamide is Eli Lilly and Company trade name for 1-butyl-3-sulfanilylurea.*

‡*Orinase is Upjohn Company trade name for 1-butyl-3-p-Tolylsulfonylurea.*

abetics can be accomplished more easily. The oral hypoglycemic agents are of real value in the treatment of diabetics who are allergic to insulin or who develop fat atrophy at the site of injection of insulin, as well as those who, because of mental or physical disability, have difficulty administering insulin.

Oral hypoglycemic agents have some definite limitations. Very few patients who became diabetic under the age of 40 years can be successfully maintained on tolbutamide therapy. This is true especially if the disease is severe enough to require an average daily dose of 20 units or more. There will be a large number of therapeutic failures if one administers tolbutamide to patients who require over 40 units of insulin daily. In order to obtain good results using oral hypoglycemic agents, patients must be carefully selected and must be under good general medical supervision. In certain patients who initially respond to tolbutamide, the drug may later lose its effectiveness. Therefore, patients must be urged to continue indefinitely to test their urine regularly for glucose and acetone. Patients whose diabetes can be controlled by means of diet alone should not be given oral hypoglycemic agents.

Dosage

The dosage of tolbutamide is fairly uniform. It should be changed only by the physician—not by the patient. Excessive dosage should be avoided, since this may increase the level of blood sugar and the degree of glycosuria and also increases the incidence of untoward toxic effects. It is suggested that tolbutamide therapy be initiated as follows: On the first day the patient should receive 3 gm. (six tablets); on the second day, 2 gm. (four tablets); and on the third day, 1 gm. (two tablets). If the clinical response to the drug is satisfactory, the dose may be reduced gradually, over a period not to exceed one week. The usual final maintenance dose is 1 gm. per day. The maintenance dose may be as low as 0.5 gm. (one tablet) per day or, at times, as high as 1.5 gm. daily, given in three equal doses. Daily doses exceeding 2 gm. should be avoided. Excessive doses do not result in a proportionate increase in hypoglycemia; however, they may cause undesirable and even serious toxic effects.

There has been some speculation as to whether diabetes mellitus may become more severe in patients who receive tolbutamide. From clinical experience to date there is no evidence that this is true. Further experience with tolbutamide therapy must accrue before it can be said with certainty that the overworked cells of the pancreas do not eventually become exhausted as a result of the stimulating effect of this drug. There is some evidence that tolbutamide appears neither to destroy the beta cells nor to cause a state of exhaustion in these cells. For example, the amount of insulin required to control a diabetic is the same, or in some instances less, after tolbutamide has been discontinued. This phenomenon has been observed in insulin-dependent, brittle and labile diabetics.

Hypoglycemia as a result of tolbutamide therapy rarely occurs. When it does, it is transient, mild and readily amenable to treatment by ingestion of carbohydrate. Hypoglycemia occurs most often during the change-over period from insulin to oral hypoglycemic agents. This change from insulin to tolbutamide must be undertaken with care. It is recommended that the urine be tested for glucose and acetone at least twice daily and that careful attention be given to the diet during the transition period. The dosage of insulin usually is reduced 20 to 40 per cent the day tolbutamide therapy is begun. Subsequent daily reductions in the dosage of insulin are made, if the patient responds satisfactorily. The change-over can be accomplished without the necessity of hospitalization. However, the patient must be urged to test his urine for glucose frequently, and it is recommended that the patient be observed in the physicians's office daily for at least the first five days after the administration of tolbutamide is begun. If glycosuria persists in spite of the administration of 2 gm. (four tablets) of tolbutamide daily in divided doses, the patient is not a suitable candidate for treatment with the oral hypoglycemic agents. If acetone appears in the patient's urine during this period of observation, insulin therapy should be resumed immediately.

Oral hypoglycemic agents should not be employed in the treatment of the acute complications of diabetes. Regular insulin therapy is indicated in patients with intercurrent infections, diabetic acidosis, diabetic coma and in patients undergoing major surgical procedures. It should be emphasized that oral hypoglycemic agents are not superior to insulin and that their main advantage is the convenience of their ad-

ministration. Almost all diabetics will at some time develop complications, and therefore all should be thoroughly instructed in the use of insulin, even though many of them may ordinarily be maintained for long periods of time on oral hypoglycemic agents. As a rule, there is no clear-cut indication for the simultaneous administration of tolbutamide and insulin. However, in certain instances this may be justified; for example, in certain cases of insulin-resistant diabetes the huge doses of insulin that otherwise would be required may be reduced as much as 75 per cent if tolbutamide is administered simultaneously.

Duncan, one of the leading authorities on the subject of diabetes, recently summarized the important aspects of the management of this disease. The obese diabetic should be urged to reduce his weight. In new cases of uncomplicated diabetes, tolbutamide therapy should be given a trial. It is recommended that tolbutamide therapy also be tried in all diabetics who have developed the disease after the age of 40 years, who are not obese, who do not exhibit any acute complications of the disease, and who formerly required insulin to control their diabetes.

Tolbutamide may prove of value as a research tool. It is suspected that the action of the drug indicates that diabetes mellitus may be more than one clinical entity. The fact that over 50 per cent of adult diabetics respond well to treatment with tolbutamide while only a very small per cent of juvenile diabetics respond favorably appears to separate diabetes into two categories. It has been suggested that adult diabetics who respond to oral hypoglycemic agents are suffering from diabetes not due to an absolute lack of insulin but due to some interference with the proper liberation and utilization of insulin. Conversely, diabetics who do not respond to tolbutamide are thought to have no inherent insulin available. If these theories are correct, the two groups of patients should afford opportunity for further research and a clearer understanding of diabetes.

Toxicity

Something is known concerning the toxic effects of tolbutamide. Since this substance resembles the sulfonamide compounds, and since the latter are known to produce granulocytopenia, it was feared that this toxic effect might also occur in a significant number of patients receiving tolbutamide. However, to date this has not been the case. Leukopenia with neutropenia has been reported to occur in a few instances, but the general opinion prevails that tolbutamide is relatively nontoxic and safe for general use. There have been several reports on large series of patients who have received the agent over periods of three to six months with no apparent serious toxic reactions. Nevertheless, it is recommended that patients receiving tolbutamide be carefully observed, since the effects of long term use of this agent are still unknown. Experimental studies in dogs suggested that tolbutamide might have a slight, but progressive, deleterious effect on the liver. To date, however, no serious liver damage in humans who have taken the drug for long periods has been reported. In spite of this, it is my practice to perform liver function tests on patients receiving tolbutamide.

Minor toxic, cutaneous reactions have been reported in approximately 2 per cent of all patients treated. To my knowledge, exfoliative dermatitis has not occurred in patients receiving tolbutamide. On occasion, pruritus may be the patient's only complaint. Erythema, maculopapular rash and urticaria have been observed at times. As a rule these cutaneous reactions have not been severe enough to warrant discontinuation of treatment. At times they are transient and disappear even although the administration of tolbutamide is continued. In some instances mild gastrointestinal disturbances, namely, slight anorexia, heartburn and nausea, have occurred.

Comment

The present discussion has been concerned largely with tolbutamide, which at the time of this writing, has been the most widely used oral hypoglycemic agent. Other substances also have been reported to be effective by the oral route of administration. Biguanide compounds combined with insulin have been reported to be effective in the control of diabetes in a few patients in whom the disease could not be controlled by insulin alone. Unfortunately, there is a high incidence of untoward toxic effects associated with the use of biguanide compounds. Investigators at the Scripts Clinic and Research Foundation have reported studies using phenethyl biguanide in the treatment of diabetics. Approximately one-third of these patients were said to be satisfactorily controlled. However, this group of patients was composed

of stable diabetics over 44 years of age who previously had required only moderate amounts of insulin daily. A group of British investigators has reported that intensive therapy with aspirin at times abolished glycosuria and lowered the fasting blood sugar in diabetics. No decisive effect on glucose tolerance was demonstrated. Another oral hypoglycemic agent, chlorpropamide (Diabinese*), is now being evaluated in the treatment of diabetes. Preliminary reports suggest that it may be of some value. There is every reason to believe that more effective oral hypoglycemic agents will become available in the future.

Diabinese is Chas. Pfizer and Company trade name for chlorpropamide.

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Target — — Diabetes

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The Diabetic Triopathy

JOHN B. SELBY, M.D., and JAMES L. STAMBAUGH, M.D.*
Lexington, Kentucky

ALTHOUGH diabetes is considered a chronic and incurable disease, the outlook for the patient has improved with each decade since the discovery of insulin in 1921. This change in the status of diabetes is evident from the statistics collected by life insurance companies. For example, in 1940, only one insurance company in the United States and Canada offered insurance to diabetics, whereas at the present time, 75 per cent of the companies will insure them. The use of insulin to control diabetes and the use of antibiotics to control infection have markedly changed the course of diabetes.

Prior to the introduction of insulin, approximately 50 per cent of diabetics died from acidosis and coma. At the present time death owing to these causes is rare. For example, there were approximately 17,000 admissions to St. Joseph Hospital in Lexington, Kentucky, during the past seventeen years. A review of the causes of death during this time reveals that only 11 deaths resulted from diabetic coma, an incidence of less than 1 per thousand admissions.

Further evidence of the rarity of death owing to diabetic coma is shown in a recent analysis made by one of us (J.B.S.) of the records of the 52 diabetic patients who died in the Good Samaritan Hospital in Lexington, Kentucky, during the last 3½ years. In no instance was death attributed to diabetic coma. The commonest cause of death in this group of patients was coronary heart disease and congestive failure. Uremia of various types was listed as the primary cause of death in 9 patients. The average age of death of these 52 patients was 66 years. The change in the mortality of diabetes is clearly illustrated in table 1 and figure 1. From these data it is evident that the diabetic's chances of survival are affected by much the same hazards as confront the general population.

Root and his colleagues[1, 2] have employed the term "triopathy" to describe a triad of complications that commonly occur in diabetic patients. These patients usually show, first, clinical evidence of neuropathy, then diabetic

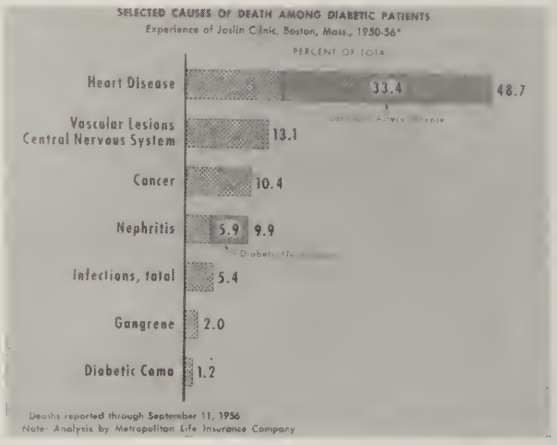


Fig. 1. Selected causes of death among diabetic patients.

retinopathy, and finally, nephropathy. In some instances the order of occurrence of these three complications may vary, in that the neuropathy may occur last, rather than first. This grouping has served to focus the physician's attention on the frequency with which one or more of these complications may occur in the same patient.

Neuropathy

The evaluation of neurologic complications in the diabetic patient is beset with pitfalls. First, there is considerable disagreement as to what constitutes diabetic neuropathy, and clarification of this matter is needed. For example, Goodman et al[3] have pointed out that, if such minor changes as impairment of vibratory sense are considered significant, the incidence of neuropathy may be as high as 90 per cent in diabetic patients. On the other hand, another authority on the subject, Rundles,[4] prefers to restrict the diagnosis of neuropathy to cases with objective neurologic signs that persist beyond the acute stage of diabetes. Using this criteria, the frequency of this complication was found to be only 4 per cent in his series of 3,000 diabetics. Secondly, the pathologic lesions of diabetic neuropathy are poorly understood. If the neuritis is due to sclerosis of small vessels, as is often maintained, the infrequency of this complication is difficult to explain in patients with generalized arteriolar sclerosis and hypertension who are not diabetic. Finally, diabetics are subject to the same neurologic disorders that occur in non-diabetic individuals. In fact, diabetics are, perhaps, more vulnerable

*Sections of Medicine (Doctor Selby) and Ophthalmology (Doctor Stambaugh), Lexington Clinic.

TABLE 1

Causes of Death of 9,554 Diabetic Patients*

	Naunyn Era 1898-1914 Percentage	Allen Era 1914-1922 Percentage	Banting Era 1922-1936 Percentage	Hagedorn Era 1937-1943 Percentage	Chas. H. Best Era 1944-1948† Percentage
Coma present	63.8	41.5	8.4	3.2	1.9
Coma absent					
1. Cardiorenal-vascular					
(a) Arteriosclerotic	17.5	24.3	53.8	64.8	69.1
(b) Nonarteriosclerotic	0	0.4	0.4	0.3	0.9
2. Infections	7.4	12.7	13.7	11.0	7.5
3. Cancer	1.5	3.8	8.7	8.8	8.6
4. Tuberculosis	4.9	4.9	4.2	2.5	2.0
5. Other causes	4.9	12.4	10.8	9.3	9.8

*Prepared by the Statistical Bureau of the Metropolitan Life Insurance Company.
†Deaths reported through May 26, 1948.

to such complications as cross-leg paralysis and desk palsies of the ulnar nerves. Therefore, the physician must not assume that all neurologic disorders that occur in diabetics are due to the diabetes.

Diabetic neuropathy, in contrast to other neuropathies, is characterized by (1) a definite predominance of sensory symptoms, (2) an extremely high incidence of absent reflexes in the lower extremities, (3) frequent disturbances of the autonomic nerves, and (4) the existence of a specific treatment. Diabetic neuropathy is more likely to occur in patients who have had diabetes longer than five years and in those who are in the older age group. Pain, especially in the legs and feet, is the most frequent symptom. The pain usually is of a constant, dull, aching type, but may simulate the darting pain of tabes. Often the pain is localized in the calf muscles and may be mistaken for muscular cramps. The pain usually is made worse when the patient is exposed to cold. It may occur during the day, but usually is more severe at night when the patient is lying quietly in bed. The accentuation of the symptoms at night and their alleviation on walking are almost of pathognomonic significance. Often the pain is accompanied by hyperesthesia and paresthesias in the legs, toes and plantar surfaces of the feet. Tenderness of the calves also is common.

In the study referred to above, Goodman and his colleagues[3] found objective sensory loss to be uncommon in a series of 261 diabetic patients. Absent patellar reflexes were found in 25 per cent of their cases. The achilles reflex was absent in an even larger number (48 per cent). This finding may result from the fact that the distal portion of the peripheral nerve is predominately affected. Diminished vibratory sense in diabetic neuropathy is a rather nonspecific finding. This finding, in itself, is not of great diagnostic value, because it is not uncommon in otherwise healthy persons over 50 years of age. Severe motor disturbances are rare in diabetic neuropathy, although muscular weakness of the legs is not uncommon. While it is difficult to classify diabetic neuropathy, four general groups may be mentioned.

The first group is composed of patients who have uncontrolled diabetes with functional complaints (for example, pain) but no definite neurologic signs. With treatment of the diabetes, there is almost invariably relief of symptoms within a week.

The second group includes those patients with ischemic neuropathies. The most frequent objective signs are areflexia in the lower extremities and definite evidence of obliterating arteriosclerosis.

In the third, and largest, group are those patients with organic diabetic polyneuritis. Their pain is severe and is considerably worse at night. This interferes with the patient's sleep and frequently results in exhaustion. Serious sensory and trophic disturbances occur in these patients. The protein content of the cerebrospinal fluid is elevated in about half of them. The very rare symptom complex which resembles tabes dorsalis ("pseudotabes diabetica") is included in this group. Another rare complication that occurs in these patients is Charcot's joint (chiefly tarsal and metatarsal). The joint is swollen but is not inflamed or pain-

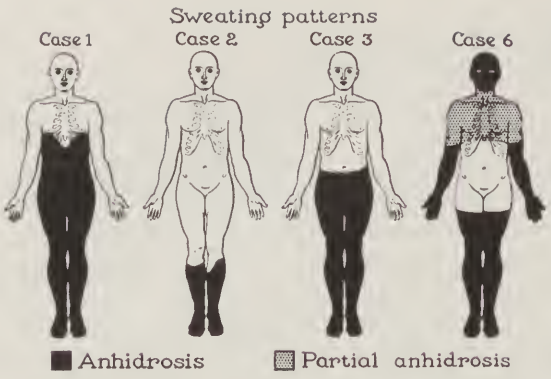


Fig. 2. Sweating patterns in four cases of diabetic diarrhea. (From Diabetes, 5:25-31, 1956)

ful. Following treatment of the diabetes, improvement of symptoms in this group of patients may occur over a period of weeks to months.

The fourth group consists of patients with diabetic autonomic neuropathy, which usually is associated, at least in part, with one of the other types of neuropathy. It is manifested by loss of ability to sweat, trophic disturbances of the feet and toes, orthostatic hypotension and gastrointestinal symptoms, including diarrhea and constipation. The typical diabetic diarrhea is nocturnal, may last for weeks or months, and frequently is associated with fecal incontinence. The sweating patterns of four recently reported cases of diabetic diarrhea illustrate the multiple autonomic disturbances often seen in such patients (figure 2). Sexual impotence and urinary incontinence or retention are not uncommon in patients with these severe neuropathies.

As Bailey[5] has emphasized, the neuropathy is peripheral and autonomic, since there is no good evidence available that the spinal cord is significantly affected. Isolated cranial nerve palsies should not be attributed to diabetes mellitus without first carefully excluding all other possible causes. Cranial nerve palsies in diabetics usually are caused by tiny vascular lesions in the midbrain. The prognosis usually is good.

Retinopathy

The current concept is that the earliest detectable sign of diabetic retinopathy is the finding of small capillary micro-aneurysms. These are tiny, red dots in the retina, which previously have been regarded as deep hemorrhages. Unlike hemorrhages, they are not prone to undergo rapid resolution. Root et al[2] included in their cases only those with true hemorrhages and the characteristic "hard white exudates" of diabetes, in addition to capillary micro-aneurysms. Friedenwald[6] called attention to the association of capillary micro-aneurysms and intercapillary glomerulosclerosis, and speculated that the two lesions had a common pathogenesis. In these two areas of the body a poorly supported capillary bed apparently suffers from degeneration of the basement membrane. Identical staining characteristics are present in both lesions and both, unlike other arterial and arteriolar changes, are almost diagnostic of diabetes mellitus.

The metabolic disturbances underlying the development of capillary micro-aneurysms is unknown, although it is a well established fact that their appearance frequently is related to the duration of the disease. The appearance of these ocular lesions in flat retinal preparations is shown in figure 3. Further progression

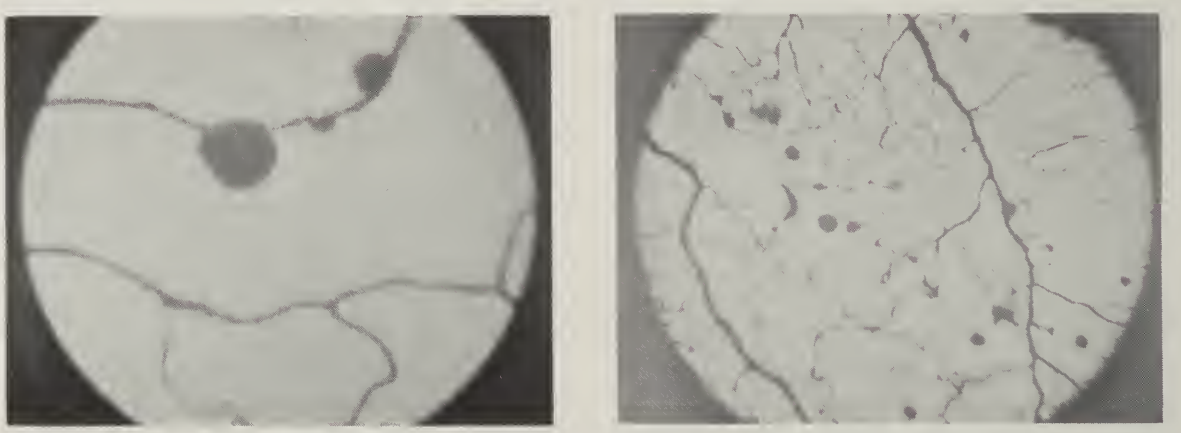


Fig. 3. Flat preparations of human diabetic retinas; (a) (left) discrete, thick-walled capillary aneurysms; (b) (right) multiple capillary aneurysms. (Courtesy of Dr. John J. Hartford)

of the retinopathy may lead to hemorrhage and retinitis proliferans. This is analagous to an organizing hematoma in other tissues and seriously impairs vision. Another ocular catastrophe is occlusion of the central retinal vein. About one-fourth of patients in whom this occurs subsequently develop glaucoma.

The pituitary and adrenal glands may play a secondary role in diabetic retinopathy. For example, retinitis occurring in diabetics during pregnancy (in the absence of hypertension) has been reported to disappear after delivery. Poulsen[7] reported that complete regression of retinopathy occurred following the development of hypopituitarism in a 30-year-old white female who had had diabetes for 21 years. Circumstantial evidence has been collected[8] which supports the hypothesis that both pancreatic lesions and the action of ACTH are factors in the development of diabetic retinopathy as well as Kimmelstiel - Wilson lesions in the kidney. Rifkin and his colleagues[9] have carried out studies which indicate that there is no clear-cut evidence of any overactivity of the adrenal cortex in these complications. Despite the fact that clinical improvement has been reported in some cases of retinopathy and nephropathy following hypophysectomy and adrenalectomy, it is our opinion that this is probably nonspecific and due to the effect of the surgical procedures on the hypertension and edema.

Since the development of the triopathy, particularly retinopathy, is related to the duration of the diabetes, this complication is most likely to plague juvenile diabetics. Therefore, the importance of striving for the best possible control of the disease in juvenile patients is obvious.

Nephropathy

It is of some historical interest that in 1877 MacKenzie reported necropsy findings, in a diabetic, of minute retinal aneurysms, changes in the venules, and associated kidney lesions. However, his report went virtually unnoticed for a number of years. It would seem that too much importance has been attached to the "intercapillary lesions in the glomeruli of the kidney" first reported by Kimmelstiel and Wilson. These authors associated the lesions with a clinical syndrome of diabetes, nephrotic edema, gross albuminuria and hypertension. Subsequent studies[10] have shown that the fully developed nephrotic syndrome occurs in less than 10 per cent of cases in which these intercapillary lesions are found at autopsy. One might compare these lesions, which often occur without the nephrotic syndrome, to the asymptomatic stage of retinal capillary aneurysms seen in diabetic retinopathy.

When diabetic nephropathy is clinically evident, the Kimmelstiel-Wilson lesions almost always are present, in association with marked arteriolar sclerosis and pyelonephritis. An example of this type of lesion is shown in figure 4. The first sign of nephropathy often consists

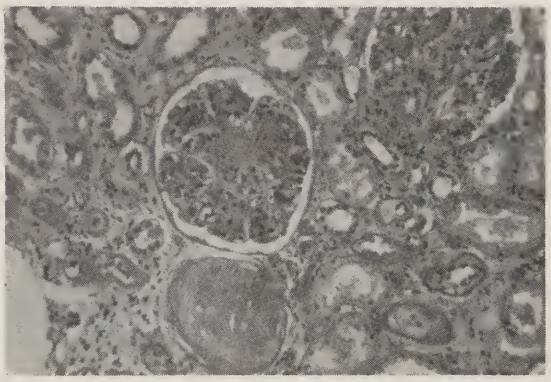


Fig. 4. Microphotograph of kidney showing lesions of diabetic glomerulosclerosis (Kimmelstiel-Wilson disease) and arteriolar sclerosis.

of albuminuria or edema. Clark and Skillern[11] have pointed out that lowering of the serum albumin level is a frequent early finding in diabetic nephropathy. There also may be an inverse relationship of serum cholesterol and plasma protein concentrations. Within a year, the edema may become permanent, hypertension develops, and the retinal lesions usually advance. The nephrotic stage may appear benign, but sooner or later, nitrogen retention and clinical uremia result. For example, of the 51 deaths that occurred in the series of 155 cases of diabetic triopathy reported by Root et al,[2] there were 33 who died of uremia and 5 others who had uremia at the time they died of coronary occlusion or cerebrovascular accident. Like retinopathy, nephropathy is more closely correlated with the duration of the diabetes than with either the patient's age or the severity of the disease.

Treatment

The treatment of all three parts of the diabetic triopathy is discouraging. The whole matter resolves itself into the prevention, by means of better control of the diabetic state. That the degree of control, as well as the duration of the disease, are significant in the development of these degenerative changes finds

support in the reports by Root and his colleagues[2] and by Jackson.[12]

In my practice, I have adopted a regimen which is a modification of the Joslin criteria for good control. Diabetes is considered to be under good control if the following criteria are fulfilled: 1. The patient never has been in coma, except in instances in which the initial diagnosis of diabetes was made when the patient was in coma. 2. Insulin or hypoglycemic agents have been started, when indicated, within a few weeks after the onset of the diabetes. 3. Urine tests for sugar have been made at least once daily since the onset of the diabetes and a conscientious attempt has been made to keep the urine sugar-free, or nearly so, before meals; adjustments in the dosage of insulin having been made according to results of the urine tests. 4. A diet has been followed, with careful measurement of food, since the onset of the diabetes. 5. Regular physical examinations by a physician and laboratory tests have been done at least once a year and the results of the blood and urine tests have been satisfactory.

Summary

The use of insulin has resulted in an increase in the life expectancy of the diabetic and in a marked decrease in the acute complications of diabetes, such as acidosis. On the other hand, the chronic complications of diabetes, such as neuropathy, retinopathy and nephropathy, are becoming more common. The latter three complications have been grouped together and given the name "diabetic triopathy." The retinopathy and nephropathy of diabetes have striking pathologic similarities. Treatment of all three lesions of the triopathy is unsatisfactory. There is good evidence to suggest that the lack of adequate control of diabetes and the duration of the disease are important factors in the production of these complications.

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The Management Of Diabetic Acidosis

Beverly T. Towery, M.D.*
Louisville, Kentucky

Introduction

SEVERE acidosis is one of the most dangerous complications of uncontrolled diabetes, because of the threat of coma and death if treatment is not provided without delay. Effective therapy depends on prompt recognition of the patient's difficulty, a reasonable understanding of the fundamental basis of the disorder and a knowledge of the measures which must be carried out to correct the metabolic derangements. The physician must recognize the serious consequences of prolonged acidosis and the grave implications of drowsiness, stupor, coma and shock; otherwise he may underestimate the urgency of the situation and fail to provide adequate treatment soon enough.

Constant supervision and frequent reappraisal of the patient's status are absolutely essential in detecting clinical and chemical changes which necessitate modifications in treatment. If the physician is thoroughly familiar with the characteristics of a favorable therapeutic response and carefully seeks the cause of unusual findings, he is unlikely to overlook hypokalemia, hypoglycemia or other complications which may arise. Such experience and clinical judgment can be learned only at the bedside, through careful observation and evaluation of the evidence. Moreover, close scrutiny may reveal that the acidosis is a complication of another major disorder, such as lung abscess, bacterial endocarditis, perforated duodenal ucler, etc.

Inasmuch as the onset of acidosis may constitute the first recognized evidence of diabetes in children or young adults, coma may be unavoidable in this group of patients. Under ideal circumstances, in which the patient has ready access to medical care and seeks help promptly, severe acidosis should be encountered only rarely and coma should not occur. However, it seems inevitable that on occasion the physician will be confronted by patients who are constitutionally or emotionally incapable of regulating their disease. For example, during a five-year period, 1953 through 1957, 115 patients were admitted 229 times to the Louisville General Hospital because of diabetic acidosis, some having been admitted repeatedly for emergency care.

In children and young adults emotional crises, dietary indiscretions, inadequate doses of insulin or mild infections may provoke acidosis with amazing rapidity. This loss of control depends, to a large extent, on the adrenocortical response to stress. Recognition of this fact has led to a better understanding of the pathogenesis of acidosis among severe diabetics. For example, an emotional crisis stimulates an increase in the secretion of "diabetogenic" steroids (viz., hydrocortisone), which aggravate the diabetes, and this, in turn, tends to maintain excessive adrenal activity. Likewise, suboptimal control of the diabetes appears to be an important stimulus of the increased adrenocortical activity which serves to establish the vicious cycle. Thus, almost adequate doses of insulin may become grossly inadequate within a relatively short period.

Pathologic Physiology

The exact role of insulin in glucose metabolism has not been defined, and, therefore, the metabolic defect in diabetes mellitus is incompletely understood. The following familiar statement best summarizes our present knowledge. In diabetes the peripheral utilization of glucose is markedly impaired at normal blood glucose concentrations. Recent evidence suggests that insulin is essential for the diffusion of glucose into the cell, but alternative explanations cannot be excluded at this time[1]. It seems likely that augmentation of blood glucose concentration, largely by hepatic glycogenolysis, does favor glucose utilization, as emphasized by Soskin; but this compensatory mechanism is inefficient and permits the loss of large quantities of glucose in the urine.

Because carbohydrate utilization is inadequate to meet the demands for energy, the catabolism of fat and protein is greatly augmented. The former is especially important from a practical standpoint since it bears directly upon the problem of ketone acid production. It appears that a deficiency of oxalo-

*Chairman, Department of Medicine, University of Louisville School of Medicine.

acetate permits the accumulation of excessive amounts of acetyl coenzyme A and that this, in turn, favors the overproduction of acetoacetic acid.[2]

In diabetic acidosis the liver produces ketone acids at a rate which exceeds the capacity of the muscles to metabolize them. Consequently they accumulate in the body and may eventually reach very high concentrations in the blood. The deleterious effects depend largely upon the fact that acetoacetic* is a relatively strong organic acid. More precisely stated, the tendency of the acid to dissociate is such that it provides a much higher concentration of hydrogen ions than exists normally in the fluid of the body:

$$KH \rightleftharpoons K^- + H^+$$

It is capable, therefore, of producing a dangerous increase in the hydrogen ion concentration (fall in pH), despite the action of buffer systems which normally maintain plasma hydrogen ion concentrations within narrow limits. Thus diabetic acidosis constitutes an example of metabolic acidosis which is due to the accumulation of ketone acids and should, perhaps, be designated by the term "diabetic ketoacidosis."

Because of the nature of the keto-acids, their deleterious effects are exerted in the following ways: 1. The capacity of the plasma buffers, notably bicarbonate, eventually becomes exhausted, so that the plasma pH steadily falls. 2. With rising plasma concentration of ketones their renal excretion is greatly augmented and, despite maximal acidity of the urine, a high proportion of these acids must be excreted as sodium salts. Thus the sodium derived primarily from $NaHCO_3$ is largely lost in the urine. 3. Regardless of the acid-base aspects of keto-acid excretion, these substances greatly augment the solute load imposed on the kidney and inevitably lead to the depletion of body water even though the kidney maintains maximal concentrating ability. 4. A unique feature of the $NaHCO_3/H_2CO_3$ buffer pair is the fact that the acid portion is capable of dissociating into H_2O and CO_2 and excretion of the latter by the lungs constitutes an important compensatory mechanism in stabilizing plasma pH. An increase in the depth and rate of breathing favors the removal of CO_2, and Kussmaul overventilation is one of the classical features of diabetic acidosis. Although this respiratory response increases the water lost in expired air, it is relatively much less important in the production of dehydration than the renal losses.

Because of inadequate peripheral utilization and enhanced hepatic glycogenolysis the blood sugar concentration rises. With increasing hyperglycemia, renal tubular reabsorption fails to completely remove glucose from the tubular urine and increasing amounts appear in the urine. Not only does this represent an important waste of calories, but it requires the excretion of progressively larger volumes of water as the glucose concentration rises. If one adds the markedly augmented excretion of ketone bodies already discussed, the main mechanisms for the loss of electrolytes and water become apparent. It should be noted that these losses are not limited to the extracellular fluid but involve the intracellular compartment as well.

In diabetic coma, the acidosis and dehydration apparently account for the clinical manifestations of impaired cerebral function. The brain apparently does not require insulin for glucose metabolism, and the manifestations of keto-acidosis are presumably not due to impaired cerebral utilization of glucose.

One of the most intriguing aspects of diabetes mellitus is the fact that the administration of insulin alone will prevent or correct all of the foregoing metabolic derangements.

Recognition of Diabetic Acidosis

The presence of high concentrations of glucose and ketone bodies in the urine of a comatose patient constitutes such an important clue in the recognition of diabetic acidosis that therapy should be initiated on the basis of this evidence alone. The validity of this generalization is based on the fact that glucosuria in association with ketonuria is so characteristic of diabetes mellitus, whereas the ketonuria of starvation is not associated with glucosuria, and that non-diabetic individuals may exhibit transient glycosuria without ketonuria in response to severe stress, e.g., cerebral hemorrhage.

Although glucosuria and ketonuria are characteristic of uncontrolled diabetes, usually there will be equally strong clinical evidence of diabetic acidosis. Severe acidosis is much more likely to be encountered in the young than in

Acetoacetic is used as the prototype in this discussion, but these remarks apply to the related four carbon ketone acids.

the elderly diabetic. Even though diabetes has not been recognized previously, an adequate history should provide important evidence for its presence. Nearly always the patient will have noted polyuria, and excessive thirst; despite an adequate or even excessive food intake, weight loss is common. With increasing hyperglycemia and acidosis, the appetite begins to fail and weakness and lack of stamina become obtrusive. As matters worsen, anorexia is followed by nausea and vomiting; failure to ingest food and liquids aggravates the dehydration already present and constipation becomes severe. Eventually the patient complains of weakness and listlessness and avoids physical activity; he may become aware of labored breathing and somnolence. With increasingly severe acidosis and dehydration, the patient becomes progressively more obtunded. Fever and abdominal pain may be impressive symptoms and, together with stupor, constitute important evidence of impending coma. Once the patient has become comatose and cannot be aroused, the prognosis is extremely grave, regardless of other considerations. Fortunately, actual coma is relatively rare, because the patient or his family will usually seek medical care before complete unconsciousness occurs.

Often the above sequence of events may have been initiated by an infection, such as pneumonia, staphylococcal infections of the skin, streptococcal pharyngitis, pulmonary tuberculosis or acute pyelonephritis, to enumerate a few of the most common offenders.

In the patient known to have diabetes, the recognition and prevention of acidosis should be relatively easy. However, in the individual who is receiving insulin, one is faced with the possibility of hypoglycemia rather than acidosis. The sequence of events which precedes unconsciousness in insulin hypoglycemia is apt to progress more rapidly than in diabetic acidosis, and one may obtain a history of recent recovery from mild hypoglycemic episodes. Despite large doses of insulin, the intake of food may have been haphazard or inadequate, and the onset of unconsciousness may be predicted in relationship to the dose of regular or long-acting insulin. Also, the patient may have complained of hunger, anxiety, double vision and incoordination prior to the onset of coma. Furthermore, with insulin hypoglycemia convulsions are frequent; in diabetic acidosis they are rare. In hypoglycemic coma the patient's hydration, respirations and circulatory status are not detectably abnormal, as opposed to the severely dehydrated, acidotic patient with Kussmaul breathing.

The recognition of hypoglycemia is also aided by the demonstration that the urine contains no ketone bodies and that a specimen collected a few moments after the bladder is drained by catheter contains no glucose, whereas some sugar may have been present in the first specimen. Final confirmation of hypoglycemia depends upon the demonstration of an excessively low blood sugar concentration and the response to intravenous administration of glucose.

Space does not permit a detailed discussion of the differential diagnosis of diabetic acidosis and other forms of coma; however, a few remarks may be in order. The differentiation of diabetic from renal acidosis may, at times, be difficult, but it is helpful to recall that in diabetes the normal kidney will approach its maximal functional capacity in response to the metabolic acidosis. Consequently, the urine will be highly concentrated and the rate of excretion of acid and ammonia by the kidney is quite high. By contrast, fixation of urine concentration and pH characterize renal insufficiency and the presence of albumen, casts and blood in the urine assists in the diagnosis. In uremia the acidosis is much more severe than would be predicted from the degree of ketonuria. Furthermore, edema would not be expected in diabetic acidosis if renal function is normal. In the edematous patient with diabetic glomerulosclerosis, ketoacidosis is usually not obtrusive.

Various types of poisoning or intoxication may pose difficult diagnostic problems. For example, severe alcoholic stupor may make it impossible to recognize diabetic acidosis without appropriate laboratory studies. Acute methyl alcohol poisoning, with its severe degree of acidosis, may be a source of confusion, but glycosuria and marked hyperglycemia would be unlikely. Also the ingestion of toxic glycols ("smoke") may lead to similar confusion but, if the possibility is recognized, it may be verified by the presence of hypoglycemia.

Intracranial infections, neoplasms, vascular accidents, etc., may be exceedingly difficult

to differentiate from diabetic acidosis, especially when such disorders occur in a diabetic patient. One must depend upon the presence of signs of a localized lesion, the history of recent or remote convulsive episodes, as well as clinical evidence of meningitis or trauma. Inasmuch as major cerebral insults may be associated with significant hyperglycemia, an immediate diagnosis may not be easy; however, as in the case of stress-induced hyperglycemia, significant ketonuria is usually not present.

Examination of the patient with a severe degree of diabetic acidosis usually reveals important evidence of extreme dehydration: a dry inelastic skin; sunken, soft eyeballs; and exceedingly dry mucous membranes. Close attention to the respiratory activity is very helpful. In the classical Kussmaul breathing there is a notable increase in the depth of inspiration and the respiratory rate may be accelerated with somewhat labored expirations. The pulse is rapid and weak and the blood pressure is often low; severe hypotension with deficient peripheral circulation is an ominous sign of extreme dehydration and acidosis. Shock is almost invariably present in fatal diabetic acidosis. The abdomen may be diffusely tender and somewhat resistant to palpation; fecal impaction is common, especially in children. Fever and leukocytosis are often present in severe acidosis. If recognizable, the "fruity" odor of acetone may be of assistance in reaching a prompt diagnosis. Ophthalmoscopic evidence of diabetic retinopathy may occasionally provide helpful evidence and assist in excluding such disorders as brain tumor or hypertensive crisis, in which papilloedema is commonly found.

Laboratory Diagnosis

The importance of ketonuria and glucosuria has already been emphasized, and the demonstration of very high concentrations of ketone bodies in the blood or plasma confirms the presence of diabetic acidosis and provides a rough index of its severity.

Other important laboratory data include: hematocrit determination, total and differential leukocyte counts, blood sugar determination and an analysis of the electrolyte concentrations of the serum or plasma. The normal concentrations of these constituents and values characteristic of severe diabetic acidosis are as follows:

	Normal Values	Diabetic Acidosis*
Sodium	132-142	125 mEq/l
Potassium	3.5-5.0	3.5 mEq/l
Total CO_2	26-30	5 mEq/l
Chloride	98-106	90 mEq/l
Glucose	60-90	800 mg%
pH	7.37-7.45	7.01
pCO_2	38-40	19 mm.Hg

It has been customary to assess the severity of acidosis by reference to the serum carbon dioxide content, because it represents a close approximation of the bicarbonate concentration and therefore the extent to which ketone acids have depleted the main plasma buffer. It will be noted that in the normal individual the sum, chloride plus CO_2, is only about 10 mEq/l. less than the sodium concentration, whereas in the patient with acidosis this difference is much larger. On this evidence one can assume that approximately 20 mEq/l of $NaHCO_3$ has been lost by reaction with ketone acids. Despite the fact that the plasma CO_2 content is of rather limited prognostic value, it is safe to assume that an individual with a plasma CO_2 content below 10 mEq/l. requires prompt and vigorous therapy.

From the standpoint of diagnosis, the blood sugar concentration is important. Although it may not correlate closely with the severity of the dehydration and acidosis, the highest blood sugar levels are usually seen in the most seriously ill patients. The other data listed are extremely helpful in evaluating electrolyte deficits and in planning therapy; of these, the serum pH is least likely to be available and changes in pH can only be inferred from other clinical and chemical evidence.

The Treatment of Acidosis and Coma

Although certain general principles are valid in guiding the treatment of diabetic acidosis, modifications are often necessary to provide optimal therapy for the individual patient. The objectives of treatment are: (1) Immediate and intensive insulin therapy. (2) The administration of parenteral fluids to overcome dehydration and acidosis. (3) The prompt treatment of complicating disorders, especially infections, which increase the severity of the diabetes.

*These illustrative values are taken from Harrison, T. R.: PRINCIPLES OF INTERNAL MEDICINE, Third Edition, Chapter 49, by Louis G. Welt and Charles H. Burnett. Blakiston, New York, 1958.
The glucose values are for whole blood (Nelson-Somogyi); other data are for serum.

Insulin Therapy

Insulin is the most important single agent in the treatment of diabetic acidosis. If the diagnosis is certain, the first dose should be administered without delay by the physician or the family prior to transfering the patient to a hospital. Failure of the patient to receive insulin before he reaches the hospital may be a decisive factor in the death of an occasional patient.

Once the patient has reached the hospital, he should be given 100 units of crystalline insulin as soon as the diagnosis has been confirmed. Most workers agree that this should be administered intravenously, and if the patient's condition is critical because of deep coma, an additional 100 units should be given subcutaneously. Prior to insulin administration, a blood sample should be obtained; however, in no case should insulin therapy be deferred until exhaustive chemical studies are completed, unless there is serious doubt that diabetic acidosis exists. Insulin therapy should be repeated every hour during the early phase of management. If the CO_2 content is below 10 mEq/1., it is probably wise to continue the hourly administration of 200 units of crystalline insulin (100 intravenously and 100 subcutaneously) until there is trustworthy evidence that the insulin dose may be reduced.

The author is aware that this constitutes intensive insulin therapy, but the chief criticism of the management of most diabetic patients in severe acidosis is that they receive too little insulin, and the relative ineffectiveness of insulin in the face of extreme dehydration and acidosis justifies the use of large doses initially. The chief risk in such intensive therapy is the ultimate development of hypoglycemia, and it should be apparent that repeated studies of blood or urine, or both, are essential in the early detection of hypoglycemia.

Obviously, patients with only moderately severe acidosis will not require such intensive therapy; an initial subcutaneous dose of 100 units of crystalline insulin, followed by 50 units at hourly intervals, will usually provide adequate therapy. Also, appropriate modifications of the dose should be employed in children.

Catheterization of the diabetic patient deserves some consideration. If blood analyses are available promptly, one may avoid catheterization of the comatose patient. However, if such laboratory facilities are not available, it is probably safer to assume the risk of infection from catheterization, not only for diagnosis but to permit urinalysis at frequent intervals (15 to 30 minutes) in following the patient's response to therapy. If renal function is normal, the urine will provide a satisfactory index of changes in the blood. One must, of course, make certain that the catheter is correctly placed and that the bladder is drained as completely as possible before collecting the specimen for analysis. In the presence of severe renal disease, changes in the urine may be misleading and blood analyses obligatory. Under these circumstances, the semiquantitative estimation of blood ketones is of value. If the patient is able to void on request, catheterization should be avoided because of the risk of infection.

After the blood sugar begins to fall, the insulin dose may be reduced to 25 to 50 units every two hours and the interval between doses gradually lengthened as recovery occurs. In order to prevent hypoglycemia during this period, repeated analysis of blood or urine is required to permit adjustment of doses of insulin and glucose.

Although some have advocated the concurrent use of long-acting and regular insulin, the consensus is that such is not desirable in the treatment of diabetic acidosis. Long-acting insulin alone should never be used.

Fluid Repletion

Correction of the fluid and electrolyte deficits is mandatory and should be started simultaneously with insulin therapy. Often the problem is a difficult one, depending upon the duration of the uncontrolled diabetes. One must recognize that fluid therapy will contribute to the expansion of intracellular as well as extracellular fluid and that replacement of water and electrolyte should be based on the deficits of total body water. The average patient with severe diabetic acidosis will probably require between 4 and 8 liters of fluid during the first twenty-four hours of treatment.

At the time insulin therapy is started, one should begin the intravenous administration of 0.9 per cent saline (154 mM/1), which is readily available and satisfactory for early fluid replacement because it restores the equivalent losses of sodium and chloride usually present in diabetic acidosis. However, the water deficits are often extreme, and many recommend

the use of 0.45 per cent saline (a mixture of equal volumes of 5 per cent glucose/water and 0.9 per cent saline). These solutions are particularly advantageous when the hematocrit indicates extreme dehydration but should not be used initially, because they tend to aggravate sodium deficiency and entail the risk of water intoxication. It is desirable to administer the first fluids rather rapidly, so that the patient receives 1 or 2 liters within the first two hours. Thereafter, fluid therapy may be given somewhat more slowly. Unless there is some definite contraindication, fluids should be given intravenously. The subcutaneous administration of fluids (hypodermoclysis), especially glucose solutions, may temporarily sequester electrolytes and water at the site of injection and should be avoided during the early stages of therapy.

The use of glucose solutions in the treatment of diabetic acidosis has been the subject of much controversy in the past. However, it is now agreed by most competent observers that glucose should be used provided certain precautions are taken. This is especially true when very large doses of insulin, such as recommended here, are used in the initial stages of treatment. However, the author prefers to defer the administration of glucose until analyses indicate that the blood sugar level has begun to fall. Ordinarily, this should occur within three to four hours after the initiation of therapy. Nevertheless it must be recognized that the use of large volumes of glucose solutions enhance the likelihood of potassium deficiencies, and in the author's opinion, all glucose solutions should contain potassium if urine flow is adequate (above 40 ml./hr.). This is especially true if relatively large quantities of sodium-containing solutions have been given without potassium before glucose infusions are started.

Once glucose administration has been started, glucosuria will continue and the response of the patient can best be followed by attention to the concentration of ketone bodies in urine or plasma. In order to avoid hypoglycemic reactions twelve to twenty-four hours after the initiation of therapy, it is imperative that adequate carbohydrate intake be maintained, and one should not hesitate to continue intravenous therapy if the oral intake of carbohydrates cannot be absolutely assured. Because of the large amounts of insulin employed initially, the tendency to hypoglycemia may be great and may be delayed until surprisingly late after the initiation of therapy. The insulin, which was relatively ineffectual when dehydration and acidosis were profound, begins to exert its effect during recovery. Adequate amounts of insulin and glucose are essential in stopping the overproduction of ketone acids and the ultimate correction of the acidosis.

The use of alkali is still a matter of controversy. If blood chemical and pH studies are available, so that the disturbance in acid-base balance can be clearly defined and the response to therapy followed closely, it is possible to combat the acidosis quite promptly by the use of intravenous $NaHCO_3$. Even in the absence of these laboratory controls, it is our belief that bicarbonate solutions should be used in patients with severe acidosis, especially if coma exists. Such solutions are best prepared by the addition of 44.6 mM $NaHCO_3$ to a liter of 0.45 per cent NaCl. This quantity of $NaHCO_3$ is available in 50 ml. sterile ampules and may be added to the hypotonic saline. Bicarbonate concentrations in excess of this (45 milliequivalents per liter) should probably not be used, because of the risk of producing a significant degree of alkalosis. Also, bicarbonate administration should be reserved for the initial period of therapy, and the administration of sodium chloride solutions should not be neglected.

M/6 sodium lactate (167 mM/l.) has been used extensively but is relatively ineffectual in the presence of severe shock because of deficient metabolism of lactate.

A realization of the importance of potassium metabolism in diabetic acidosis has brought about significant improvements in therapy. The initial serum potassium concentration does not indicate the magnitude of the external losses or intracellular deficits of this ion that have occurred during the period of uncontrolled diabetes. The extent of potassium deficiency usually does not become apparent until water, sodium and chloride deficits are partially restored by the use of saline or glucose/water solutions which contain no potassium. Overzealous use of such fluids predisposes the patient to develop serious hypokalemia (electrocardiographic changes, extreme weakness which may embarrass respiration, etc.). This is due to the dilution of existing stores of potassium, continuing renal losses and the rapid transfer of potassium to the intracellular space as

carbohydrate metabolism is restored by adequate insulin therapy. It can be prevented by the addition of 40 mEq. of potassium (2.98 grams of KC1; available in sterile ampules) to each liter of glucose solution. Although this will not immediately correct the cumulative potassium deficiency, it will invariably prevent the development of significant degrees of hypokalemia. Of equal importance in avoiding potassium deficiencies is the early resumption of oral feeding so that fluids rich in potassium may be given. However, early feeding may produce vomiting and curtail the high intake of carbohydrate which is so important during the first twenty-four hours. Consequently, many physicians prefer to maintain some parenteral therapy until it is clearly apparent that the patient can tolerate fluids by mouth.

Peripheral circulatory collapse or shock is an ominous sign in diabetic acidosis and should be treated vigorously with plasma, plasma substitutes such as dextran or whole blood. Such therapy should be provided in addition to salt and water replacement already described. Danowski[3] advises the routine administration of colloid solutions regardless of whether or not circulatory collapse is apparent. Systematic studies of the hematocrit may be helpful in following the restoration of plasma water.

At one time fructose was proposed for the treatment of acidosis, because it disappears from the blood of diabetic patients in the absence of insulin. However, recent evidence indicates that this sugar is not actually metabolized in the muscle and brain during diabetic acidosis but is largely converted into hepatic glycogen. Therefore fructose should not be used in lieu of insulin and glucose for the treatment of acidosis.

Treatment of Complications

An intensive search must be made for infections which often initiate acidosis and increase the difficulty of treatment. Appropriate bacteriologic studies should be obtained promptly. Blood cultures and smears and cultures of sputum and urine may reveal the causative organism. The presence of fever and leukocytosis in the absence of infection may confuse the physician, but the adverse effects of virulent infections are so great that most authorities advocate that antimicrobial therapy be started routinely as soon as bacteriologic cultures have been obtained. Fortunately, antibiotics have significantly lessened the risk of many serious infections and the hazard they impose on the uncontrolled diabetic. Roentgenographic examination of the chest should be performed as soon as the patient's condition will permit, because of the high incidence of pulmonary tuberculosis in diabetics. If there is clinical evidence suggestive of meningitis a lumbar puncture should be performed, but probably not until the patient has received intensive insulin and fluid therapy for two to three hours. Then it should be done under the best possible circumstances, so that maximal information is obtained.

Summary

Insulin is of paramount importance in the management of the patient with uncontrolled diabetes and acidosis; however, severe derangements in fluid and electrolyte balance also must be corrected if optimal therapy is to be provided. The physician needs and deserves the guidance of laboratory evidence, but he has ample opportunity to use his clinical acumen in caring for the patient with severe ketoacidosis.

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Diabetes and Pregnancy

John S. Llewellyn, M.D.*
Louisville, Kentucky

PREGNANCY occurring in the diabetic is a problem of increasing frequency and a problem with several complications, numerous controversial modes of solution, and rather often, unsatisfactory results. The subject has occupied the time, thoughts, and talents of medical and allied investigators for many years and it is apparent that substantial but slow progress is being made. A casual review of current medical literature with the many unsolved facets, divergent views, and controversy serves to emphasize the general lack of knowledge and the great need for further clinical and experimental investigation of this problem.

Prior to the use of insulin, the young diabetic rarely lived to the childbearing age, and if she became pregnant, the maternal mortality was as high as 25 to 30 per cent. Only a mild diabetic carried her fetus to term and gave birth to an infant that survived. Today, with insulin available in several useful forms, generally improved techniques, and careful observation, maternal mortality has been reduced and is comparable to that of the general population. Unfortunately a similar statement cannot be applied to fetal mortality, because the problems of toxemia, stillbirths, congenital anomalies, hydramnios, prematurity, and neonatal deaths still exist as they did in the pre-insulin era. Fetal mortality has been reported as high as 70 per cent, and as low as 11 per cent. White[1] summarizes the natural course of pregnancy in diabetes with a single word, "destruction," and adds that with a non-intervention and nonspecific program of management only one diabetic woman in three is rewarded with a surviving infant. It is this problem of fetal mortality that deserves the most attention and concentrated study.

Fetal mortality is likewise high in the so-called prediabetic state, in which the patient exhibits no hyperglycemia nor glycosuria ordinarily but may have a slightly abnormal glucose tolerance curve during the last trimester of pregnancy. A positive family history of diabetes, obesity and a poor obstetric history are characteristic. In this group of patients the fetal mortality is as high as in the true diabetic and improvement in fetal salvage depends on the early detection of this state and early intensive therapy. Jackson[2] and Woolf[3] noted that by examining the tissues of the stillborn infant (enlarged islands of Langerhan) it is possible to make the diagnosis of diabetes mellitus in the mother years before clinical manifestations are demonstrable.

Intelligent management of the pregnant diabetic is based on certain generally recognized changes peculiar to the pregnant state. Usually, carbohydrate tolerance decreases as the pregnancy progresses and insulin requirements increase. Although there are notable and welcome exceptions, management of the diabetic rarely becomes a less complex problem with pregnancy. The increased insulin requirement which is the rule may not be manifest during the first trimester, may be minimal during the second trimester, but is usually most pronounced during the last trimester. In this period there is an increased incidence of keto-acidosis and intra-uterine death. It should be noted that during this trimester, when one normally anticipates an increased insulin dosage, a sudden and unexpected decrease may indicate intra-uterine death of the fetus. White[4] has reported that ultimate insulin requirements may decrease after two or more pregnancies. Following delivery there is usually a precipitous decrease in insulin requirements, and it is during this period immediately post-partum that insulin hypoglycemic episodes are encountered most frequently.

The renal threshold for glucose usually is lowered during pregnancy, and this is particularly true in the diabetic. The resulting glycosuria renders the control of diabetes more difficult since the degree of glycosuria may not reflect accurately the degree of hyperglycemia. Relying solely on glycosuria as a guide to insulin dosage in such instances may result in severe, repeated, and damaging hypoglycemia. Glycosuria due to the lowered renal threshold, if excessive, may lead to depletion of glucose supplies and to keto-acidosis. It is postulated

*Instructor in Medicine, University of Louisville School of Medicine.

that a lowered renal threshold for acetone bodies may occur, but there is no specific evidence to support this.

The management of the pregnant diabetic as of all diabetics, implies careful dietary restriction and regulation and adequate insulin dosage to control glycosuria and hyperglycemia, in both the fasting and postprandial states. To maintain normoglycemic-aglycosuric control and to avoid ketonuria during pregnancy, frequent observation, especially in the last trimester, is necessary. Frequent visits are needed to alter the diet and insulin dosage as carbohydrate tolerance decreases during pregnancy and then increases for a varying length of time in the immediate postpartum period. Fasting and postprandial blood sugars and urinalyses for sugar, albumin, and ketones should be made often. When ketonuria is excessive, the semiquantitative test for serum acetone levels may be employed to determine the degree of ketonemia.

In the beginning a complete and detailed history to include the previous obstetrical history should be obtained and a thorough appraisal of the patient's physical status should be made. An initial hemogram helps to determine the degree of anemia and the need for supplemental iron therapy, and an anterior-posterior and lateral radiograph of the pelvis serves to delineate obstetrical measurements and aid in determining the presence and degree of calcification of blood vessels. Marked calcification indicates premature vascular degeneration in the diabetic and is an important prognostic sign. The patient's diet should be reviewed and the necessary adjustments made. Insulin dosage schedules should be determined and altered according to the indications. The patient should be instructed regarding unfavorable signs and symptoms of poor control of diabetes, and she should be made aware of the peculiar changes in her diabetic state that may occur as a result of pregnancy.

The diet prescribed should afford adequate nutrition for the mother and fetus; approximately 30 calories per kilogram of ideal body weight. The daily caloric values may be adjusted up or down according to the degree of under-nutrition or obesity and the degree of activity of the patient. The protein content of the diet should be 2 grams per kilogram of body weight, and the remaining calories may be divided equally between carbohydrate and fat. The carbohydrate allowance may be increased during the last trimester to compensate for the increased carbohydrate demands of the fetus. For those patients receiving repository-long acting insulin preparations, a bedtime snack high in protein content will help prevent hypoglycemic episodes during the night and early morning.

In all cases, the sodium content of the diet should be limited to 1 gram daily to aid in the prevention of edema and hydramnios. When marked edema is present, more rigid sodium restriction, combined with a diuretic agent, such as ammonium chloride, diamox, chlorothiazide or thiomerin, is indicated. Vitamin and mineral supplements to the diet are added according to the individual needs of the patient. Total weight gain in the average case should be limited to 15-20 pounds. Insulin, the dosage of which will require repeated adjustment as carbohydrate tolerance changes and as alterations in the diet are made, is best administered in the long-acting form. N P H or Lente insulin serve this purpose well because of their time-action curves and because it is possible to mix either with regular insulin without influencing their individual action.

During the period of confinement and labor, the patient is allowed liquid feedings high in carbohydrate content and the urine is tested frequently for sugar and acetone. Regular insulin is administered according to the degree of glycosuria. If nausea or vomiting prevent adequate carbohydrate intake, intravenous infusions of 5-10 per cent glucose may be employed. Indwelling catheter drainage of the urinary bladder may be instituted to insure obtaining urine samples on schedule. In the postpartum period an unrestricted liquid or soft bland diet is allowed for 24 to 72 hours, and as soon as there is evidence of return of carbohydrate intolerance, a quantitative diet is prescribed and repository insulin therapy reinstituted.

Diabetes and pregnancy cannot be adequately discussed without mention of hormone therapy, chief proponent of which is White. Extensive experience and careful study of a large group of patients have led her to conclude that abnormal pregnancies in diabetics are due to hormonal imbalance.[5] The imbalance of female sex hormones is characterized by low levels of progesterone (measured by pregnanediol excretion) and high levels of chorionic

gonadotrophin. The effective correction of this imbalance by the administration of female sex hormones affords fetal and maternal protection. By employing female hormone therapy combined with strict chemical control of diabetes, White achieved a fetal and infant survival of 89 per cent, as compared to only 68 per cent in an untreated group. The incidence of toxemia declined from 33 per cent in the untreated group to 3 per cent in the treated group.

In a systematic fashion White[6] outlined four goals of management of the pregnant diabetic: (1) Maternal survival, (2) prevention of precipitation or acceleration of vascular damage, (3) increase of fetal salvage, and (4) prevention of diabetes in the child. The methods used to attain these goals are: classification of patients for fetal hazards, strict chemical control of diabetes, use of female hormones, measures to prevent edema and hydramnios, accurate timing of delivery, special care of the infant during the neonatal period, and annual follow-up of the children to detect altered carbohydrate metabolism.

There is not complete agreement regarding the value of hormone therapy in the pregnant diabetic, and further studies are anticipated with interest. Since the high rate of fetal loss in the prediabetic is as great as in the diabetic, there are some physicians who think that strict chemical control of diabetes and hormone therapy does not account entirely for the good results reported by White. There are those who do not relate fetal mortality to hormone imbalance and believe that comparable results in fetal salvage can be obtained with a strict therapeutic regimen and early delivery. In support of White's views however, Gordan[7] has stated "No one has done more for the pregnant diabetic than Priscilla White; thus it is difficult to compare the results of other series with hers because of the frequency of severe complications in the patients referred to her. Regardless of whether it is the estrogen or the skillful care of an internist—obstetrician—pediatrician team that deserves the credit, hers are some of the best results ever obtained in the therapy of these difficult patients."

The method and time of delivery of the pregnant diabetic is another phase of the problem concerning which there are widely divergent views, all with apparently adequate support. More and more however, these patients are allowed to deliver normally. At the end of the thirty-fifth to thirty-sixth week the obstetrical situation is appraised, and if the infant is small and there are no contraindications, the pregnancy is allowed to continue. Induction, when indicated, may be precipitated by rupture of the membrane or administration of pitocin. Failure of labor to progress after an eight-hour trial is an indication for Caesarean section. Other indications for section include breech presentation and a history of previous section. In all cases with obvious or anticipated complications considerable reliance is placed on the judgment of the obstetrician.

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Happiness makes up in height for what it lacks in length.

—Robert Frost

The Treatment Of Diabetic Patients With Surgical Problems

JOHN S. SPRAGUE, M.D.
Lexington, Kentucky

IT is not the purpose of this paper to expound surgical technic nor to present a series of cases showing new methods of treatment or better results than before obtained. Its purpose is to review, as briefly as possible, some of the more important facts, attention to which has been found to improve results of treatment of "surgical diabetics." Few, if any, of these facts are new; but attention to all of them is so essential to successful therapy of these patients that no apology for their repetition seems necessary.

The number of surgical patients with diabetes is increasing. According to Joslin et al,[1] about half of all cases of diabetes occur between the ages of 40 and 60. With the steadily increasing longevity of our population, not only the fraction but also the actual number of people in this age range is increasing. Not only are there more diabetics, but more of them are surviving to an age when they are more likely to suffer from neoplastic and degenerative diseases which require surgical treatment. In spite of the availability of insulin in various forms and the existence of excellent laboratory facilities, patients with diabetes, if neglected, may develop fatal keto-acidosis or severe and sometimes fatal infections.

It is well known that in normal subjects experimental trauma and other stresses often are followed by glycosuria and decreased glucose tolerance. It is also well known that physical stresses increase the hyperglycemia of diabetics, and it has been thought that the increase in insulin requirement often occurring with infections, fractures, etc., may be due to increased adrenal activity.[2] It has been well established that a severe diabetic with appendicitis or a burn of moderate degree or even dental sepsis must be carefully observed by an internist, collaborating with the surgeon. Erdmann and his colleagues[3] have stated: "The surgeon in diabetes is called upon to treat a specific local condition with which he is more or less familiar, superimposed upon a system disease best treated by the internist. Therefore, dual control is necessary by the surgeon and the internist when confronted with surgery in diabetes." McKittrick,[4] Maes,[5] Lahey,[6] and many others also have urged the wisdom of dual care. A very effective system is that followed at Pennsylvania Hospital,[7] where a diabetic team composed of two senior members of the medical staff and one resident physician assumes full responsibility for management of the diabetes, regardless of what service is primarily in charge of the patient. One of these three writes all orders for diet, insulin and whatever pertains to the patient's diabetes. Obviously, in certain instances, as for example, when the patient must be treated at home, he is fortunate to have one physician. That physician must be alert and strive to fill the roles of both internist and surgeon.

Because of improved methods of control of diabetes, this disease no longer need be considered an absolute contraindication for surgery. The surgical risk in most properly prepared diabetics is no greater than in nondiabetics. In some instances it may be less, since the diabetic patient may have had the benefit of a period of rest and preoperative treatment not always afforded the nondiabetic surgical patient. Nevertheless, the surgical diabetic must be considered a potentially poor risk and every precaution should be observed in his management.

Certain lesions are seen more often in diabetic than in nondiabetic patients. In the past, carbuncle of the neck was common and the physician suspected diabetes in every patient with this lesion. Today, as a result of antibiotic therapy, carbuncles rarely are seen. Furunculosis is frequently seen in diabetics. The complications of arteriosclerosis occur much earlier in diabetics than in nondiabetics. The surgical complications of arteriosclerosis are infection and gangrene, which may require amputation. Infection and gangrene often result from occlusive vascular disease. Prior to the introduction of antibiotics, successively higher amputations often were necessary.

Diabetics are no less subject than nondiabetics to such surgical conditions as cholecystitis, perforated peptic ulcer, et cetera. The indications and contraindications for surgical treatment are the same in both groups. However, the careful preoperative preparation of diabetic patients is more essential and time consuming. For example, the elderly, underweight, anemic diabetic patient in mild cardiac decom-

pensation, whose insulin requirement is large, may need to be hospitalized for a week or longer before cholecystectomy is performed. Not only should the carbohydrate metabolism be stabilized, but the patient's general condition should be improved as much as possible. On the other hand, an otherwise healthy diabetic who is to undergo a minor surgical procedure, such as removal of a bleeding endocervical polyp, would require little, if any, more preoperative preparation or hospitalization than a nondiabetic patient and should tolerate the surgical procedure equally well.

In the preoperative preparation of diabetics, as well as nondiabetics, it is essential that anemia be corrected, that digitalization be carried out when indicated, and that infection be treated until maximal improvement has been attained. When the proposed surgical procedure is an elective one, the physician should take adequate time to bring the diabetes under control. If the surgical lesion involves the thyroid or the biliary tract, it is especially important to replenish the patient's glycogen reserve preoperatively. On the day of operation and during the postoperative period, until the patient is able to resume oral feedings, he will require adequate amounts of glucose given by the parenteral route, along with the necessary dosage of insulin, as determined by the severity of the diabetes.

It should be emphasized that even a considerable degree of glycosuria is less hazardous to the patient than insulin shock of any degree. Insulin shock, at times, has been related to coronary and cerebral thrombosis, especially in elderly patients. The preoperative period is the opportune time to ascertain that the patient has a usual relationship between blood sugar and urine sugar levels. If he does, more reliance can be placed on the determinations of the urine sugar during the postoperative period (except after the patient has received intravenous glucose), and fewer blood sugar determinations will be required.

The use of an indwelling catheter is helpful in obtaining a urine sample which has just been excreted; a voided specimen may contain urine which has been excreted over the preceding hour or more. The guide usually employed to determine the amount of insulin (crystalline) that should be administered is as follows: Trace to 1 plus urine sugar, no insulin; 2 plus sugar (olive green in Benedict's test), 10 units of insulin; 3 plus (yellow), 15 units; 4 plus (red), 20 units. Of course, these doses must sometimes be altered to meet the patient's needs.

Blood sugar determinations are recommended immediately before and after even minor surgical procedures in all diabetics and are essential when the diabetes is severe or "brittle." Before operation, when indicated, determinations of the CO_2 combining power and other blood chemistry should be done to exclude the possibility of keto-acidosis. After a major surgical procedure in a severe, unstable diabetic, it may be necessary to make blood sugar determinations and determinations of the CO_2 combining power as often as every three or four hours for a period of 24 to 48 hours, in order to determine the insulin, glucose, fluid, and electrolyte requirements and adjust the dosages accordingly.

It is appropriate to comment on the problem of acidosis (ketoacidosis) and its relationship to surgery. The matter can be stated simply, as follows. The presence of keto-acidosis is a contraindication to surgical procedures of any degree, except in the most extreme emergencies. In other words, operation should be deferred until the acidosis has been corrected. Keto-acidosis is not likely to occur in the adult, unless the amount of glucose utilized is less than 100 gm. per day. The glycogen reserves of such patients are seriously depleted. Signs and symptoms of acidosis include weakness, anorexia, nausea, vomiting, rapid (Kussmaul) respiration, dulling of the sensorium and, often, "acetone breath." Any of these signs and symptoms should lead the surgeon to suspect acidosis and defer any surgical procedure until the condition has been corrected by means of the administration of insulin, fluids and electrolytes. This is just as essential as deferring surgical procedures in patients who are in severe traumatic or hemorrhagic shock until it has been brought under control. The surgeon should remember that keto-acidosis may mimic acute appendicitis. As a rule, however, nausea and vomiting due to acidosis precede the onset of pain. Also, of course, the pain and other symptoms of acidosis often are relieved within an hour or two following administration of insulin and fluids.

True surgical emergencies, in which time permits no preoperative preparation, rarely occur in diabetic patients. When they do occur, it is essential that the patient be under the careful supervision of both the internist and

the surgeon during the immediate postoperative period. In most cases, the development of coma can be prevented.

Summary

The number of surgical diabetics in our population is increasing. These patients have special problems which can be dealt with most effectively when the surgeon and the internist collaborate in their management. The availability of adequate laboratory facilities is important in the care of diabetic patients with surgical problems. If their preoperative preparation is adequate, most diabetics can undergo surgical procedures without great additional risk. When keto-acidosis occurs, it must be corrected before any surgical procedure is performed, except under extremely urgent and unusual circumstances.

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Manuscript Memos

Manuscripts should be submitted in duplicate to The Journal of KSMA, an original copy and one carbon, and typed with double spacing. Maximum length of an article should not exceed 4500 words, and the Board of Consultants on Scientific Articles prefers that they be briefer than this when possible.

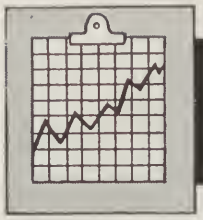
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All scientific material appearing in The Journal is reviewed by the Board of Consultants on Scientific Articles. If illustrations are submitted with a paper, The Journal will assume the cost for the first three one-column width half tones. The cost of additional illustrations will be borne by the essayist.

Arrangements for reprints of an article should be made directly with the publisher of The Journal, Gibbs-Inman Printing Company, 817 W. Market St., Louisville, Ky.

The By-laws of the Kentucky State Medical Association provide that all scientific discussions and papers read before the KSMA Annual Meeting shall be referred to the KSMA Journal for consideration for publication. The by-laws further state that the editor or the associate editor may accept or reject these papers as it appears advisable and return them to the author if not considered suitable for publication.

Please mail your scientific articles to The Journal of the Kentucky State Medical Association, 1169 Eastern Parkway, Louisville, Kentucky.



CASE DISCUSSIONS
From The
University of Louisville Hospitals



Missed Abortion

Louisville General Hospital

History

M. P., a 26-year-old white gravida 3, para 2, was admitted to Louisville General Hospital on January 18, 1958 complaining of painless vaginal bleeding for 5 days. Her last menstrual period had begun on June 9, 1957, and was normal. No more vaginal bleeding had been noted until January 13, 1958, when the patient noted a small amount of dark red vaginal bleeding. This was followed shortly by the passage of bright red blood, and similar eposides of bleeding recurred at irregular intervals up to the time of admission. During the five days prior to admission, the patient intermittently noted a "knot" in the abdomen; this was painless, and would disappear when she would turn over on her side. She had not sought medical care during the present pregnancy. Her only previous hospitalization was for the delivery of her first child in 1954. Both previous pregnancies were uneventful, terminating in the delivery of normal infants. The past history was otherwise noncontributory.

Physical Findings

On admission, the patient's blood pressure was 120/80, pulse 80, and respirations 20. The temperature was 100.3°F. The positive physical findings were confined to the abdomen and pelvis. The abdomen exhibited poor muscle tone; a symmetrical, rounded, soft, non-tender mass compatible in size with a uterus at six months' gestation was readily palpated. No fetal heart sounds could be heard on auscultation. The external genitalia were normal. The cervix was clean, soft and closed. A moderate amount of foul-smelling serosanguineous discharge was noted to be oozing from the external os. No significant hemorrhage was taking place.

On admission, the hemoglobin was 17 grams; WBC 12,000 with 70 per cent polymorphonuclear leukocytes. Urinalysis was within normal limits.

Treatment and Course in the Hospital

A Friedman test on January 21 was reported as being negative. A plain film of the abdomen showed a small fetus overlying the sacrum. The cranial bones were not well visualized on the film, so no estimate of overlapping could be made. The patient continued to have daily episodes of vaginal spotting, and the temperature rose to the vicinity of 100°F. each afternoon for five days. Management during this time consisted of 600,000 units of penicillin every 12 hours. On January 22, a staff consultant recommended termination of the pregnancy by abdominal hysterotomy.

One January 24, the abdomen was opened under general anesthesia through a right paramedian incision. The uterus was found to be enlarged to the approximate size of a 4 1/2 months' gestation. The uterus was opened longitudinally near the fundus and a macerated fetus was delivered. The uterine and abdominal incisions were then closed in layers. The patient tolerated the procedure well, and left the operating room in good condition. Her subsequent postoperative course was uncomplicated, and she was discharged from the hospital on the fifth day following the operation.

On February 14, the patient was seen in the outpatient clinic, and appeared to have made an uneventful recovery.

Discussion

Douglas M. Haynes, M.D.: Missed abortion may be defined as that clinical entity in which the death of a non-viable fetus is followed by its retention in the uterus for two months or longer. Although the condition was first described by Matthews Duncan in 1878, it was not until 1921 that Litzenberg defined precise clinical criteria for its diagnosis.

Initially, the patient wth a missed abortion gives a history of the usual symptoms and signs of early intrauterine pregnancy: amenorrhea, morning nausea, tingling of the breasts. At first, clinical examination does not deviate

from what is normally expected. There is enlargement of the uterus, and the objective signs of early pregnancy are present. The next episode usually consists of a threatened abortion syndrome, with its characteristic spotting, sometimes associated with cramping abdominal pain. With conservative therapy, consisting largely of bed rest and sedation, these symptoms subside, and the assumption is made that the pregnancy is once more progressing normally. However, repeated examinations show that something has gone wrong: the uterus fails to continue its initial enlargement, and after two or three months it is actually smaller than before; in the meantime, there is subsidence of the symptoms of pregnancy, except for the persistence of amenorrhea. Continuation of vaginal spotting is the exception rather than the rule in missed abortion; its presence in the case reported above motivated a more radical management than would ordinarily be indicated.

Although the patient remains symptomless for some time, she eventually comes to suspect that her pregnancy is not progressing normally, and at this point it is characteristic for certain symptoms to make their appearance. Since these symptoms are psychosomatic, they do not follow any precisely predictable pattern. The patient may complain of lassitude and fatiguability, constipation, bad taste in the mouth (cacogeusia), and other non-specific symptoms that are often suggested to her by the comments of solicitous friends. At this point, considerable pressure may be brought upon the physician by the patient or her family, or both, to terminate the pregnancy. However, unless persistent vaginal bleeding forces his hand, the doctor can confidently expect that with no treatment except reassurance the retained conceptus will eventually be expelled spontaneously. When this happens, the associated clinical picture is that of inevitable spontaneous abortion, followed by expulsion of a macerated fetus. There are cases on record in which intrauterine retention of the fetus has lasted so long that calcification has taken place, but this eventuality is decidedly improbable.

Since the cause of missed abortion is unknown, the management of this condition is for the most part an empiric treatment of the clinical signs and symptoms. The hypothesis has been advanced that in missed abortion the death of the fetus takes place without antecedent disturbance in the placenta, and that degenerative changes in the placenta follow at a slow rate. This is a different sequence from that seen in the usual variety of spontaneous abortion, in which the placental changes initiate the process, and are thought to be responsible for the death of the fetus. Another possible etiology may be the failure of the readjustment of the estrogen-progesterone ratio which is necessary for the sensitization of the myometrium to stimulation by the anterior hypophysis. There is some evidence to suggest that preliminary administration of estrogen to patients with missed aborton may make possible a successful pitocin induction.

From the above, it is clear that the safest method of management of these patients is watchful waiting, even though it may sometimes represent a major problem in public relations to carry out such expectant treatment. When there is persistent bleeding, as in the patient reported, definitive attempts to bring about immediate delivery may sometimes be indicated; but these should be undertaken only with full appreciation of the dangers involved in such attempts. If the size of the retained conceptus is no greater than that of a gestation period of 12 weeks' duration, it may be possible to empty the uterus by dilation and curettage. However, this procedure cannot be utilized with bulky fetuses: in such cases, it is necessary to perform hysterotomy. This should be done by the abdominal route, since the operation of vaginal hysterotomy as originally described by Dührssen is of considerable technical difficulty, and is associated with the hazard of maternal soft tissue injuries, especially to the bladder. If the amount of bleeding is not too great, it may be worthwhile to attempt conservative induction by the administration of estrogen followed by pitocin stimulation, even though this procedure is associated with a high incidence of failure.

A recently described additional complication of missed abortion is the superimposition of clinically significant hypofibrinogenemia. This does not appear suddenly, but tends rather to develop gradually over a period of days or weeks. Its incidence appears to be of the order of 27 per cent. The postulated mechanism of the fibrinogen depletion is the escape into the maternal circulation of thromboplastic substances originating in the degenerating placenta.

(Continued on Page 1031)

EDITORIALS

A New "First" for the Journal

THE Symposium on Diabetes, which appears on pages 973-1001 of this issue marks a milestone in Journal progress.

The idea for such a composite discussion of a particular diseasc was evolved by the Advisory Committee to the Editor more than a year ago. Recognizing the value of exploring all facets of a particular disease or medical problem in one issue, it votcd to devote thc scientific section of one issue yearly to such a subject.

The Committee realized that such an undertaking would require a special editor who was not only well versed in medical knowledge and writing and editing skills, but also one that would be adept at selecting qualified participants from throughout the state. It unanimously chose Wallace Herrell, M.D., of the Lexington Clinic, as symposium editor.

A member of the American Medical Writer's Association, Doctor Herrell, who was formerly associated with the Mayo Clinic in Rochester, Minnesota, was given full range in the selection of participants and subject matter.

At a meeting with Journal's Editor and Scientific Editor last Fall, Doctor Herrell discussed long range plans for yearly symposiums and the subject "Diabetes" was chosen for the "kick off" symposium in October of 1958.

The Editors felt that this would not only be a timely subject because of the forthcoming Diabetes Detection Drive sponsored by the KSMA in November, but would also be a worthwhile subject—one of interest to most Kentucky physicians.

The Journal editors and the Symposium Editor will welcome comments from readers on the Symposium Issue—a new "first" for the Journal of the KSMA, aimed at making it of increasing value to its members.

Postgraduate Training

OUR profession is concerned now with three broad divisions of postgraduate education: (1) those physicians who wish to prepare for specialty or consulting practice in a chosen limited field, (2) the refresher or year to year advancement of the specialist or generalist and (3) the more advantageous use and more systematic training of the now large number of foreign physicians who come to the United States for study. A systematic appraisal of our present methods and prospect for their improvement is under way by Educators, Hospitals, and State Medical Associations at present more than ever before. The demand for postgraduate training is increasing yearly and our facilities and plans need constant enlargement and revision.

Residency programs for specialty training are fairly well standarized upon the requirements of various specialty boards for certification. There are, however, a greater number of internships and residencies approved for training than there are qualified applicants. The demand for appointments in teaching centers is great while many approved internships and residencies in community hospitals or approved hospitals apart from medical schools go begging.

The teaching programs in these hospitals must be made more systematic and thorough if they are to attract men to their services. These hospitals have an abundance of clinical material and there are often an adequate number of Board qualified specialists on the staff for teaching, but they have neglected to set up adequate programs of instructions with the material available. Often there is a lack of out patient service.

Opinions expressed in contributions to The Journal are those of the writers and do not necessarily reflect the views of the Kentucky State Medical Association.

The American College of Physicians pioneered in the establishment of refresher postgraduate courses. From eight to ten courses of from 3 to 6 days length, covering the various fields in Internal Medicine and distributed very well over the country are now offered yearly to members of the college and others concerned with this specialty and its affiliated fields. Annual state or regional meetings of one or two days length are held in addition to a general convention of 4 days length, when advancements in the general field of medicine are presented by leading physicians.

Almost every national organization in medicine now offers similar, though usually less extensive, programs for those interested in that specialty. The physician who neglects to avail himself of these opportunities yearly, does so at his own professional loss and the peril of those persons who depend upon him to give to them the best that medical science has to offer.

The United States is now the medical mecca of the world just as Europe was a generation ago. Consequently there come to us annually hundreds of physicians from other countries eager to study our methods and to avail themselves of our advanced courses of training. We are to congratulate ourselves that this is so and to be humbly proud that we have attained world leadership in medicine as in so many other phases of modern living. The presence of these young physicians among us gives opportunity also for the extension of good will and understanding among those of the most learned of professions in all countries.

But therein lies a challenge to us. Almost always the young foreign physician has a language barrier to overcome. His basic training has been different from that offered in our schools. He is unfamiliar with our methods. He often finds patients indifferent and unreceptive to such professional care as it is his duty to render. It takes usually at least one year for him to reasonably well overcome these handicaps and to become a really helpful member of any team.

There is a feeling on the part of most countries and foreign schools to appreciate the privilege of their graduates coming here for study and to send us the best they have. We may well afford to reciprocate in giving to them the best in bedside experience and systematic teaching that we and our facilities have to offer. We may well bestir ourselves to do better. Personal appreciation, better international good will, and improved medical care world wide must surely be our reward.

The Committee on Postgraduate Medical Education of the KSMA under the chairmanship of Dr. Walter S. Coe has undertaken to explore the manner in which such training may best be presented to the physicians of Kentucky. He and his Committee have under review methods now in use in such states as Pennsylvania, Michigan, California and others whose programs are more advanced and comprehensive than ours. With their leadership and our cooperation we should experience great improvement in this activity.

Sam A. Overstreet, M.D.

The true test of civilization is, not the census, nor the size of the cities, nor the crops—no, but the kind of man the country turns out.

—Ralph Waldo Emerson

ORGANIZATION SECTION



Sam A. Overstreet, M.D., Louisville (standing), newly appointed Editor of the Journal of the KSMA, and George W. Pedigo, Jr., M.D., Louisville, (seated) new Associate Editor of the Journal, discuss the most recent issue during a visit to the Headquarters Office.

Drs. Overstreet and Pedigo Chosen to Lead Journal

Sam A. Overstreet, M.D., was named Editor and George W. Pedigo, Jr., M.D., Associate Editor of the Journal of the KSMA by unanimous vote of the Council at an open meeting on July 31.

The appointment of the two Louisville physicians, both internists, was made following the Council's acceptance of the resignation of Guy Aud, M.D., as Editor.

In accepting the Editorship, Doctor Overstreet expressed the hope that he and Doctor Pedigo would be able to lead the Journal in the same fine manner in which Doctor Aud had directed it. He stated that no immediate changes in Journal policy were anticipated and that he and his associate editor would continue to cooperate closely with the Advisory Committee to the Editor.

Doctor Overstreet, who was president of the KSMA in 1950-51—KSMA's Centennial Year, has served the Journal as Medical Editorial Editor since 1955, and will continue to supervise this department of the Journal. He has been a KSMA vice president, president-elect, and was twice orator in medicine.

Doctor Pedigo, who will fill the newly created position of Associate Editor, has been vice speaker of the House of Delegates since 1956. He was at one time orator in medicine and has served the Association in various capacities. Doctor Pedigo is also a past secretary and treasurer of the Jefferson County Medical Society.

Diabetes Detection the Target of Drive on Nov. 16-22

"Target—Diabetes" will be the slogan of Kentucky physicians during Diabetes Week in Kentucky, November 16-22, according to Robert Hoffman, M.D., South Fort Mitchell, chairman of the Associate Committee on Diabetes.

Colorful posters picturing a target and arrows saying "be sure . . . be tested" will be mailed to all KSMA members during the first week in November. Doctor Hoffman urged all members to display the signs in their offices and to cooperate by giving free urine sugar tests to their patients.

He expressed the hope that total cooperation of members would mean the best results to date in the annual drive to find the unknown diabetic. This is the eighth annual drive sponsored by the KSMA in cooperation with the American Diabetes Association. Last year 52,500 free tests were made and 137 new diabetics were discovered.

The Diabetes Detection Drive—a public service to Kentuckians—is unique since it is non-fund raising and is run by physicians. Members may obtain materials to be used in the campaign from their county diabetes chairman.

A Symposium on Diabetes, covering various facets of the disease, appears in the Scientific Section of this Journal on Pages 973-1001.

Blue Shield Seminar, Oct. 30 at Kenlake Hotel

The second annual Blue Shield Seminar at the Kenlake Hotel will be held Thursday, October 30, according to Robert W. Robertson, M.D., Paducah, KSMA president and member of the Board of Directors of Kentucky Physicians Mutual—Kentucky's Blue Shield Plan.

KSMA members of the 1st, 2nd, 3rd, and 6th Councilor Districts have received invitations to this dinner meeting, which will start at 6 p.m. Central Standard Time.

Harry Hineman, Indianapolis, director of the Actuarial and Statistical Department of the Indiana Blue Shield Plan will be the featured speaker. Mr. Hineman, who is in great demand as a speaker, will discuss, "Financing Health."

Annual Meeting News in Next Issue

Full details of the 1958 KSMA Annual Meeting—which ended as this issue went to press—will appear in the November issue of the Journal.

KSMA Staff Works July to Sept. on Delegates' Manuals

Nearly 38,000 sheets of paper and 150 stencils were used in preparing 45 separate units for each of the more than 200 manuals needed for the meetings of the KSMA House of Delegates on September 22 and 24.

The mammoth task of typing and assembling the manuals started on July 15 when the first committee report was received in the Headquarters Office. As each report was received, it was stenciled, mimeographed, and assembled into a unit.

When the last report was received in the Headquarters Office, the entire office staff cooperated in a day-long job to combine the individual reports into the manual and the manual into mailing envelopes. The final job was completed on September 9, when they were ready for mailing.

The House of Delagates Report itself numbers 30 pages and other reports in the manual run from 1 to 11 pages. Included in the complete manual are an introductory letter, the Delegates Report, resolutions, a ballot, membership reports, a constitution change, and thirty-five officer and committee reports.

Chest Symposium Set for Oct. 23 at Dist. 2 TB Hospital

A Symposium on Diseases of the Chest, sponsored by the KSMA, the KAGP, and the District Two State TB Hospital will be held at the hospital (Hazelwood) in Louisville on Thursday, October 23.

Announcement of the meeting, which will be acceptable for Category I credit in the Academy, was made jointly by George W. Pedigo, Jr., M.D., for the KSMA; Oren Beatty, M.D., Hospital Director; and Homer B. Martin, M.D., of the KAGP.

The complete program, featuring the faculty of the University of Louisville School of Medicine, follows:

6:30 p.m. "Childhood Tuberculosis—Are You Doing Your Share?," Joseph A. Little, M.D., Assistant Professor of Pediatrics

7:00 p.m. "Cardiac Manifestations in Chronic Pulmonary Disease," Grover Sanders, M.D., Instructor in Medicine

7:30 p.m. "Present Status of Surgery in Tuberculosis," John Harter, M.D., Associate Professor of Surgery

8:00 p.m. Round Table Conference—"Have You A Problem?—Current Trends in Therapy," Oscar O. Miller, M.D., Moderator, Professor of Medicine; panel members, Drs. Little, Harter, and Sanders.



Assembling the material for the KSMA House of Delegates manuals before the Annual Meeting are members of the Headquarters Office staff. From front to rear—Violet Stilz, Edna Coffey, Elizabeth Wallace, Florene Johnson, Pat Masters, and Gladys Smith.

PR Institute in Chicago Attended by Six Kentucky M.D.'s

Approximately 400 M.D.'s and medical society personnel attended the American Medical Association's 1958 Public Relations Institute at the Drake Hotel in Chicago on August 27-28.

Kentucky physicians attending included: Donald K. Dudderar, M.D., Newport; W. Irvin Abell, Jr., M.D., Richard F. Greathouse, M.D., Marvin Lucas, M.D., Rudolph Vogt, M.D., and Carroll Witten, M.D., all of Louisville.

Also attending were: Harry Lehman, Executive Secretary of the Jefferson County Medical Society and J. P. Sanford, Executive Secretary, and B. G. Grogan, Assistant Executive Secretary, of the KSMA Headquarters Office. Mr. Sanford participated in a panel entitled, "Who Do You Know?"

Dept. Heads Appointed by UK for New Medical School

Three department chairmen for the new Medical Center have been appointed by the Board of Trustees and will serve as consultants before they arrive permanently in Lexington, according to William R. Willard, M.D., Vice President of the Medical Center.

Newly appointed chairmen are: Edmund D. Pellegrino, M.D., professor and chairman of the department of medicine, effective December 1, 1958; George W. Schwert, Ph.D., professor and chairman of the department of biochemistry, effective July 1, 1959; and William H. Knisely, Ph.D., professor and chairman of the department of anatomy, effective July 1, 1959.

In announcing the appointments Doctor Willard said, "By joining the staff at this time, they will be able to become familiar with many of the physicians, medical programs, and colleges in the state. This will strengthen the ability of the University of Kentucky Medical Center to develop a total program sensitive and oriented to the needs of the Commonwealth."

Doctor Pellegrino has had an extensive experience in teaching and research and also in the provision of medical care in rural areas. A graduate of New York University School of Medicine in 1944, he is now on the New York University College of Medicine faculty and a member of the attending staff of Bellevue and University Hospitals.

Doctor Schwert is presently professor of biochemistry at Duke University School of Medicine. He received his Ph. D. from the University of Minnesota in 1943. From 1949 to 1954, Doctor Schwert held a Markle Scholarship in Medical Science awarded for unusual promise in Academic Medicine.

The new head of the Anatomy Department, Doctor Knisely graduated from the University of Chicago and completed postgraduate work for his Ph. D. at the Medical College of South Carolina. He has been a Research Fellow of the American Heart Association and at present holds an appointment as Senior Research Fellow in the U. S. Public Health Service.

AHA Issues Policy Statement On Needs of Aged

A statement of policy regarding hospital needs of the aged was recently adopted by the House of Delegates of the American Hospital Association. The statement, which supersedes all previous actions taken by the Association, follows:

"1. The American Hospital Association is convinced that retired aged persons face a pressing problem in financing their hospital care.

"2. It believes that federal legislation will be necessary to solve the problem satisfactorily. It has, however, serious misgivings with respect to the use of compulsory health insurance for financing hospital care even for the retired aged.

"3. It believes that all possible solutions must be vigorously explored, including methods by which the dangers inherent in the Social Security approach can be avoided.

"4. It believes that every realistic effort should be made to meet the hospital needs of the retired aged principally through mechanisms utilizing existing systems of voluntary prepayment. However, it is conceivable that the use of Social Security to provide the mechanisms to assist in the solution of the problem of financing these needs may be necessary ultimately.

"5. It believes that any legislation developed to provide for government participation to meet the hospital needs of the retired aged should be so devised as to strengthen the voluntary prepayment systems, and should conform to the following principles:

"a. Legislation designed to provide for the hospital needs of the retired aged should provide essential hospital services and should exclude custodial care for nonmedical reasons.

"b. Government participation should be restricted to persons over 65 who are not regularly and substantially employed. The voluntary prepayment system provides a satisfactory mechanism for the coverage of other persons, regardless of age.

"c. Any program in which the federal government participates to meet the hospital needs of the nonindigent aged should emphasize individual responsibility and make the application of a means test unnecessary for obtaining benefits.

"d. Such a program should be based on the service benefit principle and should provide benefits sufficiently comprehensive to remove the major economic barriers to hospital care for the retired aged.

"e. Such a program should make benefits available through non-profit prepayment plans.

"f. Hospitals should be paid fully for the cost of care rendered.

"g. Such a program should not provide services in facilities operated by the federal government.

"h. Such a program should provide reasonable criteria to determine the eligibility of hospitals to participate, but the federal government should be precluded from interfering in the administration and operation of hospitals providing the services.



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"i. Such a program should maintain the free choice of doctor and hospital by the recipient.

"j. Such a program should permit and encourage continuous adaptation to new knowledge in the provision of services."

This material is quoted from the Secretary's Letter of the American Medical Association (Letter No. 443—August 25, 1958).

AMA Secretary's Letter Replaced by "AMA News"

After nearly 11 years of bringing the news to key people in the medical profession, the AMA Secretary's Letter will no longer be published, according to F. J. L. Blasingame, M.D., AMA Executive Vice President.

The Letter, which was published from January of 1947 to September of 1958, will be replaced by the "AMA News" which came off the presses for the first time on September 22.

Originally started to give a mailing list of 5,000 people in medicine an easy-to-read medium of information on the work of the AMA, the letter contained news of the AMA headquarters, councils and bureaus. The "AMA News" will be mailed to 225,000 physicians and people in allied fields. It was established by the AMA Board of Trustees because of the increasing need for wider dissemination of information.

Dr. Orr at Northcutt Dedication at Park in Covington

Louis M. Orr, M.D., Orlando, Florida, president-elect of the American Medical Association was featured speaker at the dedication of the Dr. Joseph Donaphin Northcutt memorial marker at Devou Park in Covington on September 7.

Doctor Orr was introduced by Murray Kinsman, M. D., Dean of the University of Louisville School of Medicine, who reviewed the highlights of the late Doctor Northcutt's stay at the medical school.

The dedication was attended by local physicians and dignitaries as well as by an eight county delegation of physicians from counties surrounding Campbell-Kenton. Alvin C. Poweleit, M.D., Covington, was chairman of the committee planning the event.

Members Urged to Vote Nov. 4 by Legislative Committee

November 4 is the date of this year's elections for city, county, state, and national officials and all KSMA members, their families and employers are urged to exercise their voting privilege by the KSMA Committee on Legislation.

The Committee, which is headed by Thomas P. Leonard, M.D., Frankfort, urges you to get an absentee ballot if you intend to be away from your county of residence on that date. Applications for absentee ballots must be in the hands of the County Clerk at least 10 days prior to the election.

In order to vote you must be registered, be at least 18 years of age, and a resident of Kentucky for one year on or before November 4.

New President Appoints Committees to Serve KSMA in 1958-59

Robert W. Robertson, M.D., who was installed as KSMA president on Wednesday, September 24 at the KSMA Annual Meeting in September, has appointed members of 37 committees to serve the Association during 1958-59.

Following are the names of the physicians appointed by Doctor Robertson to serve on presidentially appointed committees:

Committee on Scientific Assembly and Arrangements
Robert W. Robertson, M.D., Paducah, Chairman
W. Irvin Abell, Jr., Vice Chairman
Frank L. Duncan, Monticello (term expires 1959)
Beverly T. Towery, Louisville (term expires 1960)
G. F. Brockman, Greenville (term expires 1961)
Jesse T. Funk, Bowling Green
Everett L. Pirkey, Louisville

Associate Committee on Postgraduate Medical Education
To be announced later

Associate Committee on Scientific Exhibits
Everett L. Pirkey, Louisville, Chairman
Donald K. Dudderar, Newport
Richardson K. Noback, Lexington
Vernon D. Pettit, Paducah

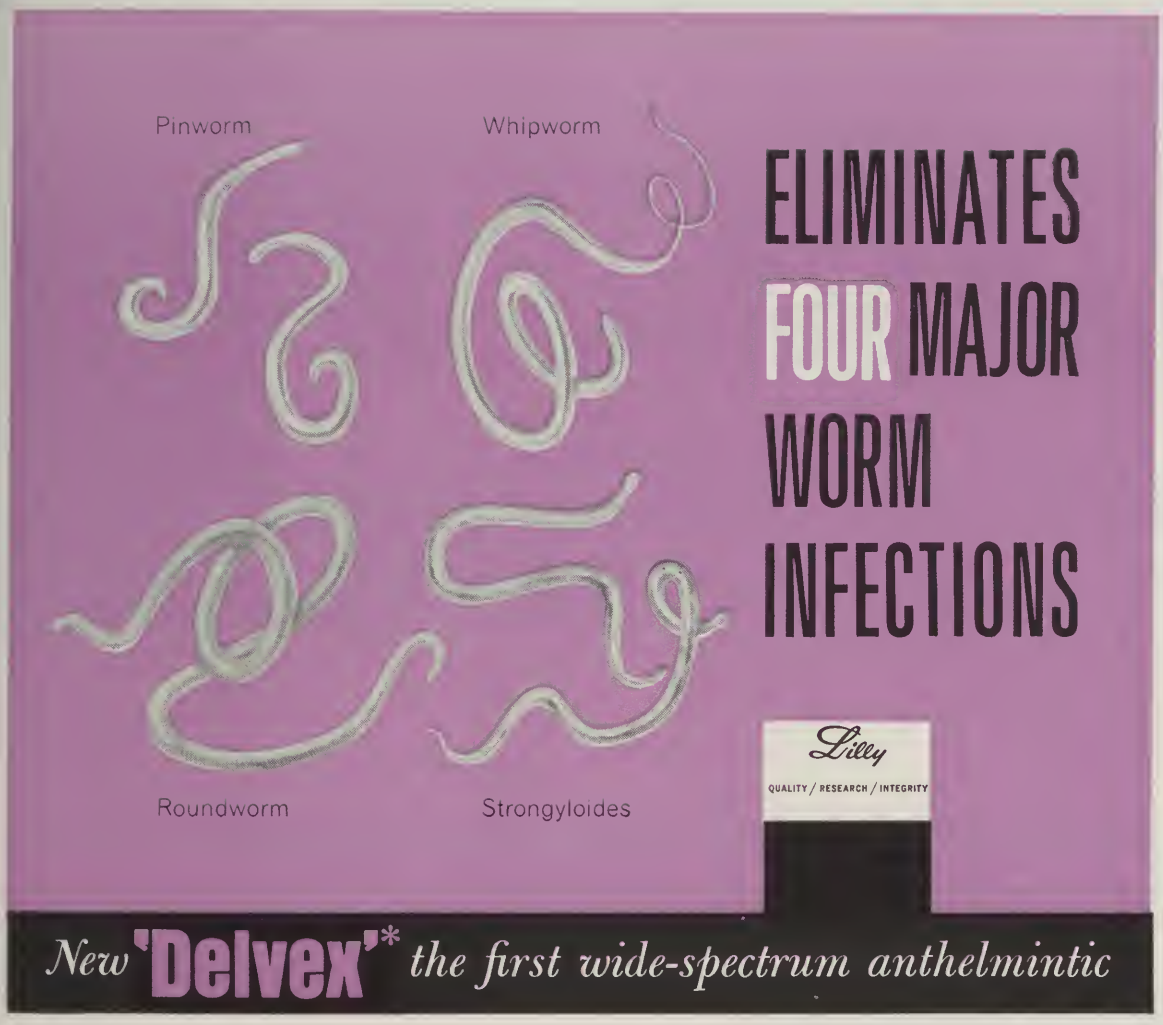
Associate Committee on Technical Exhibits
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Jesse T. Funk, Bowling Green
Robertson O. Joplin, Louisville

Associate Committee on KSMA Golf
Lanier Lukins, Louisville, Chairman
Harold Baker, Louisville
Clifton G. Follis, Glasgow
Martin Kaplan, Louisville
Kenton D. Leatherman, Louisville
William C. Wolfe, Louisville
Robert M. Wooldridge, Paducah

Committee on Emergency Medical Services
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L. L. Cull, Frankfort
Francis J. Halcomb, Scottsville
Estill F. Hall, Owensboro
Stuart M. Hunter, Louisville
Robert E. Reichert, Covington
Charles F. Wood, Louisville

Committee to Study Relations with Voluntary Health Groups
Ralph M. Denham, Louisville, Chairman
Marion F. Beard, Louisville
C. Melvin Bernhard, Louisville
McDaniel Ewing, Louisville
K. Armand Fischer, Louisville
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(Continued on Page 1013)



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1. Swartzwelder, J. C., et al.: J. A. M. A., 165:2063, 1957.

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2. Baird, H. W., III: A comparison of Meprospan (sustained action meprobamate capsule) with other tranquilizing and relaxing agents in children. Submitted for publication, 1958.

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Elgin S. Dunham, Edmonton	(General Practice)
Robertson O. Joplin, Louisville	(Aged)
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Robert F. Monroe, Louisville	(Infant and Maternal)
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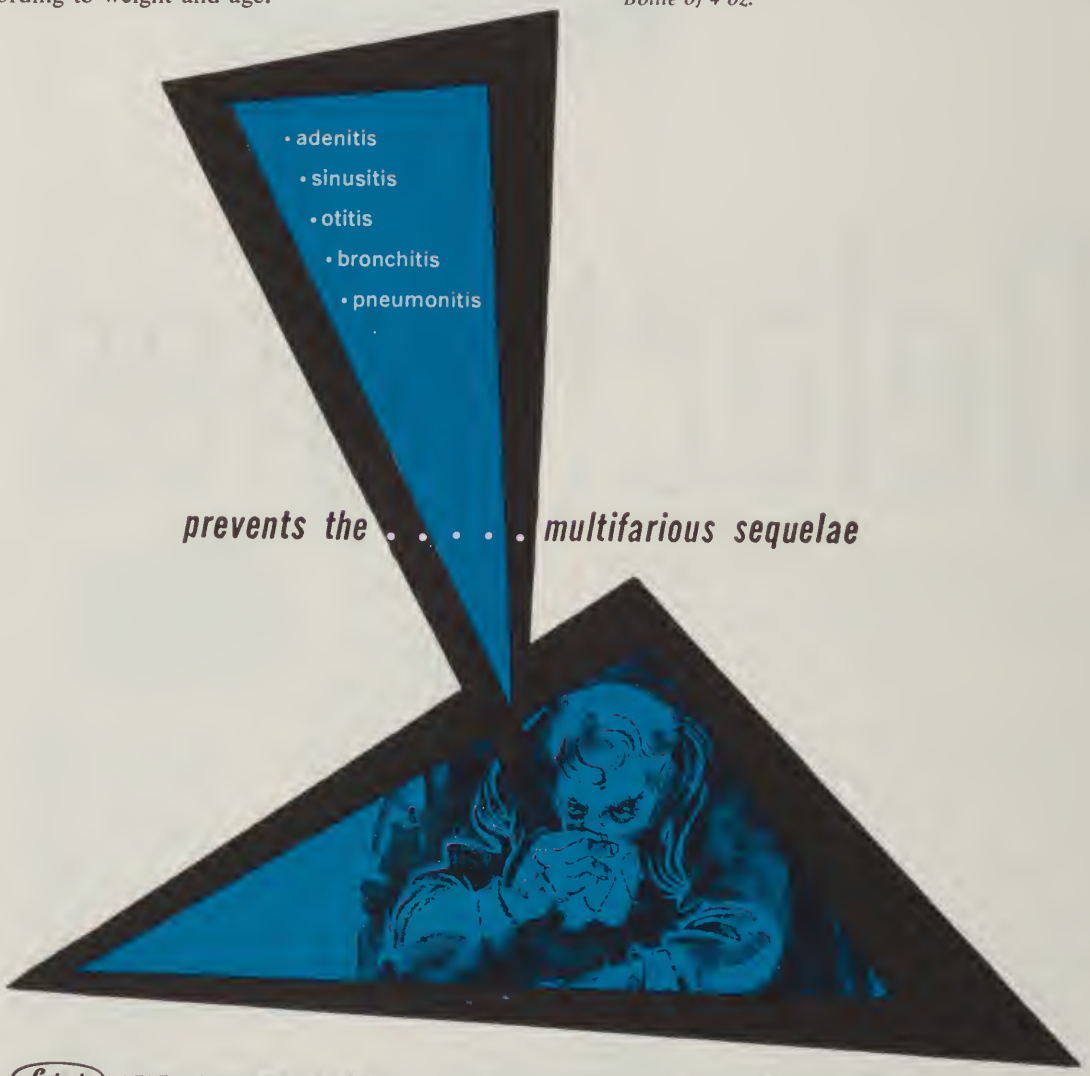
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SUPPLIED: Multiple Compressed Tablets three formulas: MEPROLONE-2—2.0 mg. pred nisolone, 200 mg. meprobamate and 200 m dried aluminum hydroxide gel (bottles of 100 MEPROLONE-1 supplies 1.0 mg. prednisolon in the same formula as MEPROLONE-2 (bot tles of 100). MEPROLONE-5—5.0 mg. predniso lone, 400 mg. meprobamate and 200 mg. drie aluminum hydroxide gel (bottles of 30).

a

Because muscles move joints, both muscle spasm and joint inflammation must be considered in treating the rheumatic-arthritic patient . . .



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heumatoid Arthritis

ble compressed tablets

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RST MEPROBAMATE-PREDNISOLONE THERAPY



b

MEPROLONE is the one antirheumatic-antiarthritic that exerts a simultaneous action to relax muscles in spasm and to suppress joint inflammation . . .

c

Therefore, MEPROLONE does more than any single agent to help the physician shorten the time between disability and employability.



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(Continued from Page 1014)

Daryl F. Harvey, Glasgow	Sixth
Shelby Hicks, New Castle	Seventh
Louis J. Nutini, Covington	Eighth
Benjamin F. Allen, Flemingsburg	Ninth
James S. Williams, Nicholasville	Tenth
Vernon O. Kash, Winchester	Eleventh
Robert B. Breeding, Monticello	Twelfth
John F. Greene, Sandy Hook	Thirteenth
Carl Pigman, Whitesburg	Fourteenth
Boyce E. Jones, London	Fifteenth
Henry M. Wilbur, Louisville	D.D.S.

KSMA Representative to Conference of Presidents and Other Officers of State Medical Association
Robert W. Robertson, Paducah

KSMA Representatives on Joint Commission for Improvement of Patient Care
Arthur T. Hurst, Louisville, Chairman
Winfrey P. Blackburn, Frankfort
Cooley L. Combs, Hazard
M. R. Walsh, Covington
Albert S. Warren, Lexington

KSMA Adviser to University of Louisville Student AMA Chapter
George W. Pedigo, Louisville

Senior Day Committee
To be announced later

SMA's New Office Building Opened with Ceremonies on Sept. 7

More than 1,000 guests attended the formal opening of the new $250,000 home of the Southern Medical Association in Birmingham on September 7, according to W. Kelly West, M.D., Oklahoma City, SMA president, who called it a "magnificent monument to Southern medicine."

Kentuckians attending the meeting were J. Duffy Hancock, M.D., Louisville, SMA Councilor from Kentucky, and A. Clayton McCarty, M.D., Louisville, past chairman of the SMA Council. Doctor McCarty made the presentation of a portrait of C. P. Loranz, who has served the organization as professional relations director for 46 years and who led the building fund drive.

Other speakers at the ceremonies included: R. L. Sanders, M.D., Memphis, J. P. Culpepper, M.D., Hattiesburg, past presidents of the SMA; Lee F. Turlington, M.D., Birmingham, chairman of the home building committee; V. O. Foster, executive director; and Mrs. Walter L. Curtis, College Park, Ga., President of the SMA Woman's Auxiliary.

The new home office building is a split-level structure, which will provide a meeting place and business center, a library-conference room, Woman's Auxiliary headquarters, and other work areas—including space for the monthly Southern Medical Journal.

Heart Assoc. Grants Given Three on U of L Faculty

Three new heart research grants totalling $14,300 have been given to University of Louisville Medical School faculty members by the American Heart Association. These new grants bring to $29,100 the total grants made to the U of L by the national hea group since July 1.

The recipients of the grants listed by Frank H Moore, M.D., Bowling Green, president of the Ken tucky Heart Association are:

Joseph P. Holt, M.D., professor of heart researcl $5,500 "for studies of residual volume of the dog ventricle."

Dr. R. Duncan Dallam, associate professor of bio chemistry, $5,500 "to study thyroxine and oxidativ phosphorylation."

Dr. Sheppard M. Walker, associate professor o physiology, $3,300 "to study the effect of electri current and certain metabolites on cardiac auto maticity."

Survey Shows Public Wants News On Medical Subjects

A nationwide study, sponsored by the National As sociation of Science Writers and supported by a gran from the Rockefeller Foundation, indicates that th American public desires science news, especially medi cal.

The study entitled: "The Public Impact of Scienc in the Mass Media," came to the surprising con clusion that because of space limitations all "mas media are transmitting only a microscopic part o the mountainous supply of science information poten tially available to them."

Much of the study, conducted by the Survey Research Center, Institute for Social Research, Uni versity of Michigan, was concerned with medica news and the reading public. It showed that (base on newspaper readers only) 41 per cent reporte that they read all medicine and health news, 35 pe cent said they read some, 13 per cent said they glanced at it, and only 10 per cent said they skipped over it

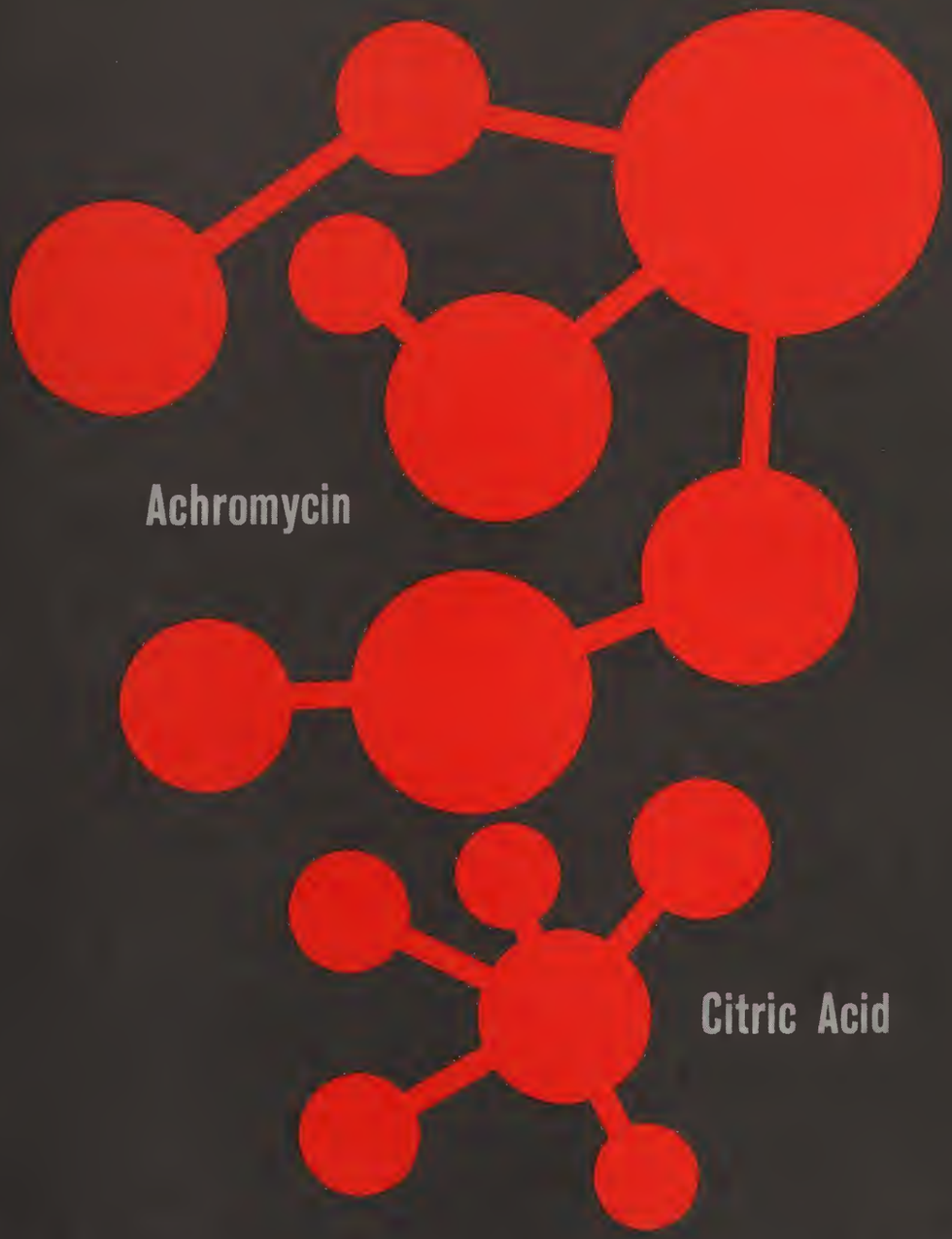
The report said, "the scientific journals of the world pour forth research papers at the rate o 20,000 a week. The science writer as the middle man in the flow of communications, must select, condens and translate from this fantastic deluge of informa tion those items he is to transmit to the lay audience of the mass media. In economic terms, it is not supply but demand that is the problem in the transaction."

Mental Health Center Dedicated

Kentucky's first local mental health center to be located in a separate clinic was dedicated in August in Bowling Green, according to H. L. McPheeters, M.D., State Commissioner of Mental Health.

Located behind the Warren County Health Depart ment, the building features private interview rooms and a play-therapy area for young patients. Until the opening of the building, the Warren County Mental Health Association operated from temporary offices in the Health Department building. Mrs. Malinda Thompson, the county's first full time social worker, recently completed her first year of duty in Bowling Green.

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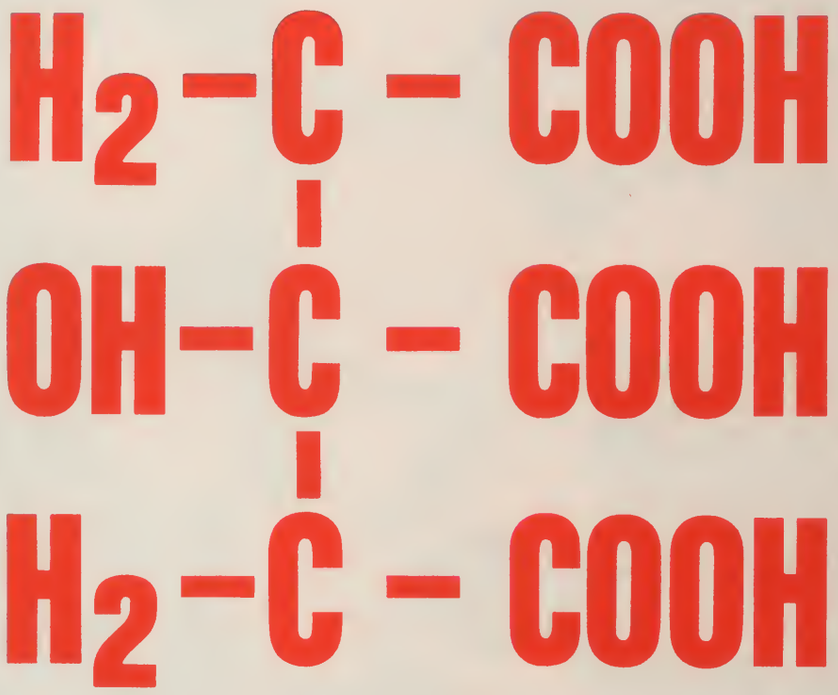
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Achromycin* V

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ASSURES EVERY PATIENT PRECISE ANTIBIOTIC ACTION UNDER THE VARIED CONDITIONS OF REALISTIC CLINICAL PRACTICE

produces optimal gastric conditions

Ideally, most antibiotics are given on an empty stomach. Since citric acid helps control unfavorable variances in gastric content,conditions in the stomach are optimal with ACHROMYCIN V tetracycline with citric acid.

prevents interference with absorption

Sequestering of antibiotic molecules by free metallic ions, always present in the intestinal tract, can deprive patients of a full therapeutic dose. The three active carboxyl radicals which protect the action of ACHROMYCIN V trap these free cations and allow uninhibited antibiotic absorption.

provides for peak antibiotic action

At the site of infection where, in essence, all antibiotics are proved, ACHROMYCIN V combats a wide range of pathogens under optimal tissue conditions. Citric acid, a factor of medically established value in the natural acid-base regulating mechanism of the G.I. tract, facilitates a more complete, and rapid antibiotic action.

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"Life Begins" was the title of the KSMA exhibit at the Kentucky State Fair in September which was viewed by approximately 40,000 persons in 10 days. Designed by the AMA, the exhibit depicted life from conception to birth. It included a tape recording describing the various phases of the exhibit. Bobbie Grogan, assistant executive secretary of the KSMA was in charge.

Symposium at Paris TB Hospital Set for October 15

Three members of the University of Louisville School of Medicine faculty will be featured speakers at the annual symposium at the District Three State Tuberculosis Hospital in Paris, Kentucky, on October 15, according to Isadore Zapolsky, M.D., the hospital's medical director.

Participants in the program and their subjects include: Oren Beatty, M.D., "Disease of the Pleura"; Richard Mardes, M.D., "Emphysema"; and Nathan Levene, M.D., "Lung Abscesses."

The program has been accepted for three hours of Category I credit by the American Academy of General Practice.

Crippled Children Society Opens Speech and Hearing Clinic

The Hearing and Speech Center of the Kentucky Society for Crippled Children, designed to serve hearing-impaired people of all ages in rehabilitation, has recently been opened at the Society's offices in Louisville.

Services offered include: audiological evaluation, hearing aid evaluation, individual and group therapy, and psychological measurements. Construction and equipment in the Center are of the most advanced design and purpose. The audiological testing rooms are of "room within a room" construction and are mounted upon cork.

The clinic's services are available to persons who have been seen by an otologist. If an otologist has not originated the referral, one is usually contacted before any services are offered.

Standardized fees will be charged for all services, and in the event that financial assistance is needed, part or all of these fees will be assumed by the Kentucky Society for Crippled Children.

Members of the Medical Advisory Board include: A. M. Forrester, Jr., M.D.; Arthur L. Juers, M.D., Joseph A. Little, M.D., and William C. Wolfe, M.D., all of Louisville.

CD Chicago Conference Nov. 8-9

More than 175 physicians and others interested in civil defense are expected to attend the ninth annual County Medical Societies Civil Defense Conference in Chicago on November 8 and 9. The conference is sponsored by the AMA's Council on National Defense.

Gunnar Gundersen, M.D., AMA president, will speak on "The Profession's Responsibilities in Civil Defense" and officials of the newly-created Office of Civil and Defense Mobilization will report on the expanding role of the federal government's defense program and the medical and health aspects of civil defense. F. J. L. Blasingame, M.D., AMA executive vice president, will welcome the conferees on behalf of the American Medical Association.

TB Symposium Planned in East

A three-day international symposium on the status of tuberculosis as a danger to life and the public in general is scheduled to be held in Philadelphia, November 20-22, under auspices of Deborah Sanatorium and Hospital, according to announcement by Jack Lesser, president of the institution. Medical specialists from this country and abroad will participate in scientific discussions at the Bellevue-Stratford Hotel from Thursday through Saturday, going on Sunday to Browns Mills, N. J., for a tour of the sanitorium.

PG Seminar in Madisonville, Oct. 16

The fourth annual Postgraduate Seminar, presented by the KSMA, the KAGP, and the Kentucky Tuberculosis Hospital Commission, for physicians in the 1st, 2nd, and 3rd Councilor Districts will be held on Thursday, October 16, at the District One State TB Hospital in Madisonville.

Complete program for the meeting, which will be acceptable for three hours of Category 1 Credit by the American Academy of General Practice, was carried in the September issue of the Journal. The meeting will open at 2:30 p.m. and will include a dinner, courtesy of the hospital.

Health Insurance in Ky. Increases

The number of people in Kentucky covered by voluntary health insurance has reached a new high with an estimated 1,703,000 persons in the state covered by some form of insurance designed to help pay hospital and doctor bills, according to the Health Insurance Council.

This figure is part of the continued growth throughout the country, the Council said. According to a Council estimate 123,000,000, or 72 per cent of the total U. S. civilian population is covered by some form of health insurance. The Kentucky figure surpasses the 1956 year-end total of 1,602,000.

KAGP Lexington Seminar Held

About 80 Kentucky physicians attended the annual Lexington seminar of the Kentucky Academy of General Practice at the Campbell House in Lexington on August 24, according to Charles Bryant, M.D., KAGP president.

Participants in the scientific program included: George McAuliffe, M.D., Kenneth Crawford, M.D., Rudy Vogt, M.D., Ralph Denham, M.D., Rudy Ellis, M.D., all members of the University of Louisville Medical School faculty.

Joint Council Gets Exec. Sec.

Howard I. Wells, Jr., M.D., Chicago, former executive secretary of the American Association for Maternal and Infant Health, has been named executive secretary of the Joint Council to Improve the Health Care of the Aged. The announcement of his appointment was made by Edwin L. Crosby, M.D., director of the American Hospital Association, who has been the Council's interim secretary.

Fall Clinical Conference Slated

The new building of the Lexington Clinic on South Broadway in Lexington will be the site of the third annual Fall Clinical Conference sponsored by the Clinic on October 22 and 23.

Symposiums included in the program are on infectious diseases, thyroid disease, and gastrointestinal disease. A full listing of speakers participating in the conference and their subjects was carried in the September issue of the Journal.



KAGP Meet at Fort Knox, Oct. 30

Seven members of the staff of the Ireland Army Hospital at Fort Knox will be featured speakers at the annual program of the Hospital for the KAGP, on October 30 according to Homer Martin, M.D., Louisville.

All KAGP members and other interested physicians are invited to attend. The meeting starts at 8:30 a.m. and will include lunch at 1 p.m. and a tour of the preventive maintenance display at 2:30 p.m. The full program of the meeting was carried in the September Journal. KAGP members will receive category 1 credit for the meeting.

Auburn Citizens Honor Dr. Wood

In a special tribute to Charles Alvin Wood, M.D., for his "twenty-eight years of devoted medical service" the citizens of Auburn celebrated "Dr. Wood Day" on September 3. Featured in the day-long program attended by hundreds of Logan countians, were talks on his life history, presentation of gifts and a plague, and a reading of the proclamation declaring the day.

A motorcade escorted him through the streets of Auburn and open house was held at his newly remodeled clinic. The mayor's proclamation termed his career a "ministry of medicine" and said that the community had long desired to pay him public tribute.

Pediatrics Group Honors Dr. James

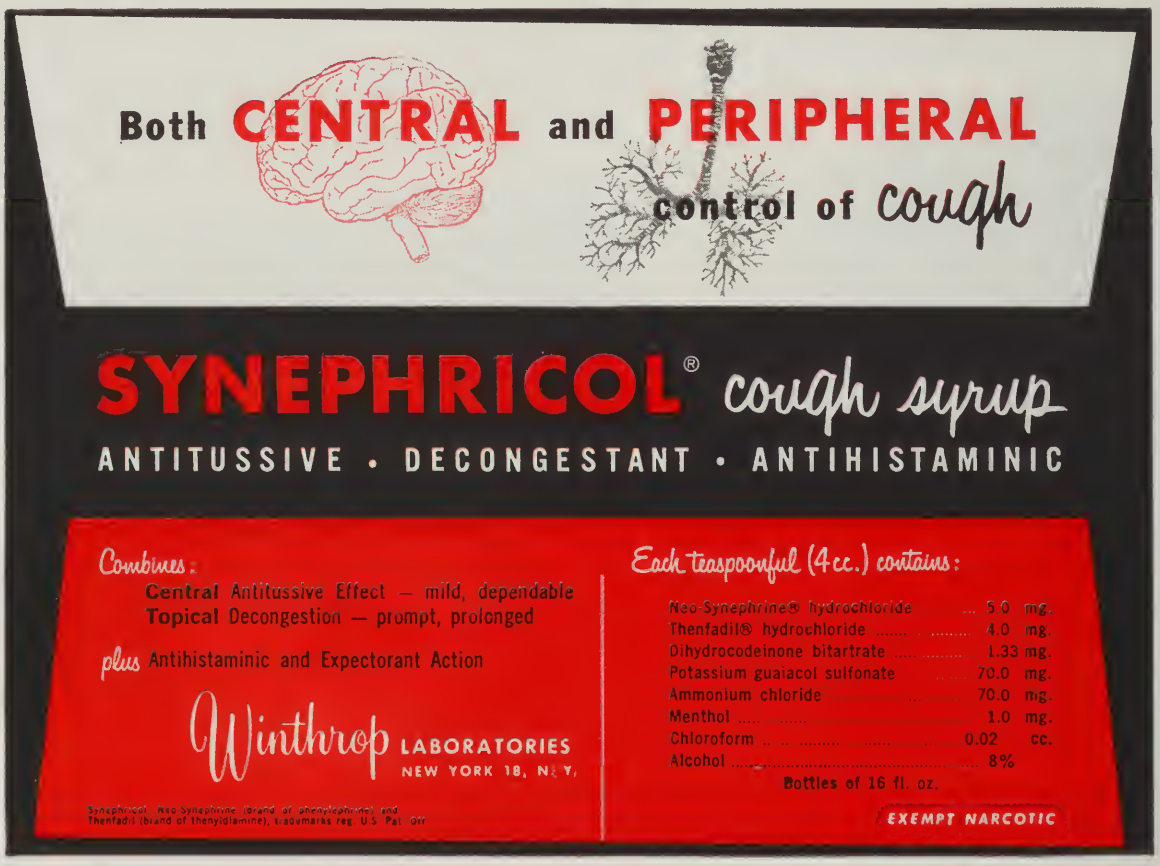
Grace James, M.D., Louisville, has been elected a Fellow of the American Academy of Pediatrics. Announcement of the honor was made by the organization's executive secretary, E. H. Christopherson, M.D., following a recent session of the executive board in Evanston, Ill. Doctor James was one of 46 pediatricians of the nation elected to the highly specialized group.

Clinic Receives $30,000 Grant

The National Institute of Mental Health has granted $30,000 to the Child Guidance Clinic in Louisville for a study of how a child's behavior is affected by the attitudes of his parents. Dr. Lovick Miller, chief psychologist at the clinic and associate professor of child psychology at the University of Louisville, announced the grant calling it "the first large grant given the clinic that is specifically earmarked for research work."

Dr. Robinson Now with Met. Life

Paul I. Robinson, M.D. (Maj. Gen. USA MC Ret.), who is well-known to many Kentucky physicians and was a speaker at the County Society Officers Conference this Spring, has been appointed Coordinator of Medical Relations for the Metropolitan Life Insurance Company. Doctor Robinson is perhaps best known for his organization and administration of the Medicare program in the Office of the Surgeon General of the U. S. Army to which he was appointed in 1956 by the Secretary of Defense.





in peptic ulcer

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In recent years, a number of new synthetic anticholinergic drugs with numerous and varying side effects have been investigated for treatment of peptic ulcer. However, a double-blind study conducted recently by Cayer et al suggests that the use of such anticholinergic drugs is seldom necessary. The authors concluded that "The percentage of 'good to excellent' results obtained in patients on continuous long-term antacid therapy with DAA (74%) is essentially the same as that previously noted in ulcer patients treated under similar conditions with potent anticholinergic drugs alone."

The authors' choice of dihydroxy aluminum aminoacetate (DAA) was based on the fact that "the tablet form of DAA (is) more active than a variety of straight aluminum hydroxide magmas." They further commented that "Because of the convenience of tablet medication as compared with the liquid gel—a convenience which in the use of other tablets is gained at the expense of therapeutic effectiveness—dihydroxy aluminum aminoacetate was used exclusively."

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Each teaspoonful (5 cc.) contains:

l-Lysine HCl	300 mg.
Vitamin B_{12} Crystalline	25 mcgm.
Thiamine HCl (B_1)	10 mg.
Pyridoxine HCl (B_6)	5 mg.
Ferric Pyrophosphate (Soluble)	250 mg.
Iron (as Ferric Pyrophosphate)	30 mg.
Sorbitol	3.5 Gm.

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Bridgehaven Given $10,000 Grant

Bridgehaven, the Kentucky Department of Mental Health's "half-way house" for mental patients, has been awarded $10,000 by the Kentucky Social Welfare Foundation to underwrite operating costs for the current fiscal year. In announcing the grant, the Rev. Joseph H. Voor, chairman of Bridgehaven's advisory board, said the money would enable the rehabilitation center to employ another professional staff member to work with Executive Director Leroy Joseph, Jr., and thus accept more patients.

Bridgehaven was opened in February to help mental patients bridge the gap between the hospital and the community.

"Reach for Tomorrow," a dramatic documentary film of five human experiences along the road to rehabilitation, has been prepared by the National Society for Crippled Children and Adults. Narrated by Henry Fonda, it took over a year to produce, with technical crews traveling more than 10,000 miles to shoot more than 10,000 feet of film to give full portrayal to the broad scope of care and treatment available to the child who must walk with crutches, the adult confined. It is suitable for use on television public affairs programs, for showing at public health groups, service clubs, annual conventions and board meetings. It takes about 26-35 minutes running time and is available on rental basis for $3.50 plus postage from the National Society for Crippled Children and Adults, Inc., 11 South La Salle St., Chicago 3, Ill.

Case Discussion

(Continued from Page 1003)

This is then followed by depletion of the level of circulating fibrinogen, with secondary development of a hemorrhagic tendency. Fortunately, this complication was not a feature of the present case.

County Society Reports

LETCHER

The Letcher County Medical-Dental Society held its annual Ladies' Night Meeting in banquet session at the Pine Mountain Hotel on August 26, according to R. Dow Collins, M.D., Whitesburg, Society secretary.

Featured speaker was Cordell Hull Williams, M.D., Hazard, who spoke on "Hypertension." He was introduced by Charles C. Rutledge, M.D., Hazard, KSMA's Councilor for the 14th District.

A number of guests and wives of members were in attendance at the meeting. T. M. Perry, M.D., Jenkins, presided at the meeting. The meeting was planned by Carl Pigman, M.D., and Lee Moore, D.D.S., both of Whitesburg. Table flowers and corsages were provided by Owen Pigman, M.D., and Mrs. Pigman. Mrs. Owen Pigman and Mrs. Lee Moore were in charge of arrangements and decorations.

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THE FOLLOWING FINDINGS ARE HIGHLY INDICATIVE OF GOUT: (1) *Tophaceous deposits* resulting in irregular, asymmetrical deformity of joints; (2) *Elevated serum uric acid levels* (above 6 mg.%); (3) *Pain relief with colchicine.* When findings suggest gout, therapy with 'Benemid' should be started immediately.

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'Benemid' is firmly established as an *effective* and exceptionally ***safe*** uricosuric agent. 'Benemid' approximately doubles the excretion of uric acid; reduces serum uric acid levels toward normal; often prevents formation of new tophi, and gradually mobilizes existing uric acid deposits; minimizes incidence and severity of future attacks.

'Benemid' is of remarkably low toxicity—usually so low as to be clinically insignificant—even in patients who have been on uninterrupted therapy for almost a decade. The uricosuric effects of salicylates and 'Benemid' are mutually antagonistic and these compounds should **not** be used together.

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NEWS ITEMS

Mary N. Smith, M.D., has been appointed Boyle county health officer and medical director of the Boyle County Board of Health, Doctor Smith, who was formerly in private practice at Booneville succeeds P. C. Sanders, M.D., Danville, who retired after many years of service. She graduated from the New York University College of Medicine where she graduated in 1945 and interned at the Kings County Hospital, Brooklyn, N. Y., and briefly at Louisville General Hospital.

Travis B. Pugh, M.D., medical advisor to Selective Service Board No. 95 in Bowling Green, has received a 15-year certificate for voluntary service with the Board there. He began his service with the Selective Board in Brownsville.

Jo Anne Sexton, M.D., formerly of Lexington, assumed the duties of local health officer at the Pulaski County Health Center in August. In addition to serving Pulaski County, Doctor Sexton will also serve McCreary and Whitley Counties. She graduated from the University of Louisville Medical School in 1957 and interned at Louisville General Hospital.

M. A. Shepherd, M.D., county health officer for Henderson, Union, and Webster counties has resigned to continue his studies in public health under a U. S. Public Health Service grant. He plans to go to the University of North Carolina, Chapel Hill, for a master of public health degree.

Bernard I. Popham, M.D., has completed a residency in internal medicine at VA hospital in Louisville and opened an office in the Medical Arts Building in Louisville. A graduate of the University of Louisville in 1947, he interned at St. Joseph's Hospital in Louisville and was in Lebanon Junction from 1949-53. From 1953-55 he was on active duty with the U. S. Navy Medical Corps.

Marion W. Page, M.D., was honored on September 7 for 50 years of service to Cuba and surrounding communities in the southern part of Graves County. Doctor Page Day was sponsored by the Cuba Baptist Church with a basket lunch on the church grounds. Among the speakers was J. T. Fuller, M.D., Mayfield.

Marion A. Douglass, Jr., M.D., a graduate of the University of Louisville in 1955, has opened an office in Magnolia for the general practice of medicine. Doctor Douglass interned at the Medical College of Virginia in Richmond in 1956 and then served two years in the U. S. Navy as a Lieutenant.

W. Elwood Kozee, M.D., one of the rural scholarship loan recipients, has opened an office in Olive Hill for the practice of medicine and obstetrics. Doctor Kozee, a graduate of the University of Louisville School of Medicine in 1957, interned at Spartanburg General Hospital, Spartanburg, South Carolina. He is a native of Grayson County.

C. C. Howard, M.D., Glasgow, has been appointed by Governor A. B. Chandler to serve on his Committee on Employment of the Physically Handicapped.

In Memoriam

CLAUDE WILSON, M.D.
Greenville
1880 - 1958

A native of Ohio county, Doctor Wilson died suddenly at his home in Greenville on August 20. He had practiced there since 1914.

Doctor Wilson, who graduated from the University of Louisville Medical Department in 1910, had practiced in Fordsville, Olive Hill, Salt Lick, and Central City before coming to Greenville. He had practiced medicine for 48 years.

NEWS ITEMS

Marion W. Page, M.D., who has practiced medicine in Cuba, Kentucky, for fifty years, was honored by his patients and friends at an open house at his home on September 1. Ceremonies honoring Doctor Page followed a box dinner.

J. C. Morrison, M.D., Hickman, was honored on 50 years of medical practice at an appreciation dinner in Hickman on September 10. The dinner was sponsored by the Women's Society for Christian Service.

Development of a coordinated plan for future action in meeting the increasingly serious problem of air pollution is on the agenda of the National Conference on Air Pollution set for November 18-20 at the Sheraton-Park Hotel, Washington, D. C. Representatives from governmental bodies, industries and voluntary organizations have been invited to attend, the Public Health Service has announced.

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PERTINENT PARAGRAPHS

The Bell System Science Series will present its second television program devoted to the working of part of the human body in "Gateways to the Mind," the story of the human senses, which may be seen on the NBC network on Thursday, October 23 at 8 p.m. (EDT). "Hemo the Magnificent," an earlier program in the same series, was devoted to the story of blood and the circulatory system. After the telecast date, "Gateways to the Mind" will be available on 16 mm. film by Bell Telephone companies for group showings to interested organizations.

Fifty-six Veterans Administration hospitals and clinics will participate in a National Institutes of Health study of the neurological disease, amyotrophic lateral sclerosis, commonly known as Lou Gehrig's disease or ALS. The project will also include study of related neurological disorders, the VA said. According to the chief of the VA's neurology division in Washington, D. C., neither cause nor cure for ALS is known.

The second annual convention of the American Association of Medical Assistants will be held at the Palmer House, Chicago, on October 31 and November 1 and 2. The Association, which is made up of men and women who are employed as assistants in physicians' offices, was organized in 1955.

The Mid-West Forum on Allergy will hold its annual meeting December 6-7 at the Sheraton-Cadillac Hotel in Detroit, Mich. The meeting, announced by Joseph H. Shaffer, M.D., of the group's Committee on Arrangements, is sponsored by the Michigan Allergy Society. Further information may be obtained by writing to John M. Sheldon, M.D., general chairman, in care of the University Hospital, Ann Arbor, Mich.

The Department of Occupational Health of the University of Pittsburgh is the fifth institution to be granted approvial of a residency program in occupational health by the Council on Medical Education and Hospitals of the American Medical Association. The other four are Cincinnati, Rochester, Ohio State and Yale Universities. The University of Pittsburgh residency is for three years, two of which are based at the department's headquarters at the Graduate School of Public Health. The third, or in-plant, year is spent at one of the industrial health facilities approved for participation in the program.

A new 27-minute AMA film, "The Medicine Man," which dramatically pinpoints the fight against quackery in the food and nutrition field will be available to local medical societies after September 15. The film, prepared especially for airing over local television stations under the auspices of local medical societies, the film shows how modern "medicine men" dupe the public into spending millions of dollars on unnecessary or over-priced nutritional products. For information on procuring the film for use on local television stations, contact the KSMA Headquarters Office, 1169 Eastern Parkway, Louisville 17, Ky.



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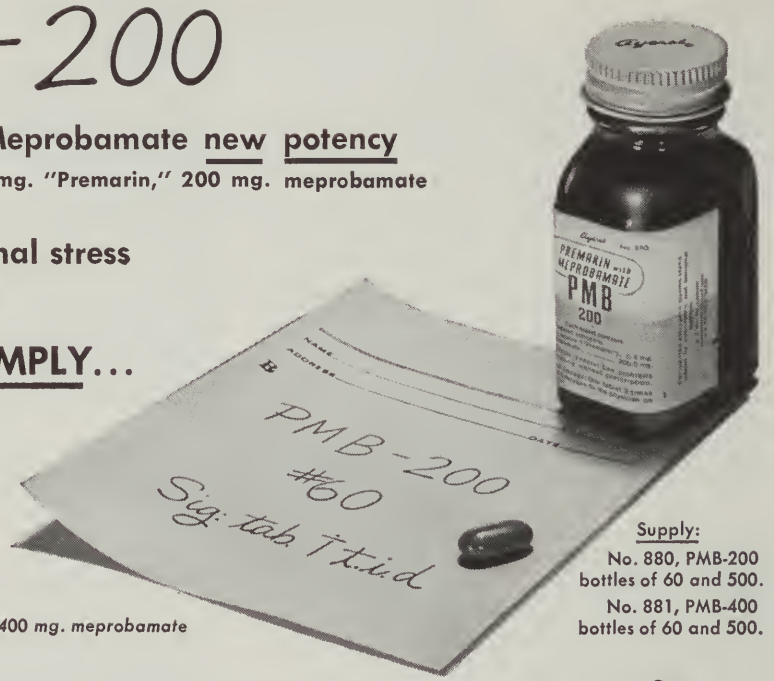
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A prenatal study of twins will be made by the University of Louisville School of Medicine under a $57,500 grant from the National Institute of Health, Dr. Philip Davidson, president of the university, has announced. The study will be headed by Alex J. Steigman, M.D., head of the pediatrics department, and Frank Falkner, M.D., assistant professor of child health. The grant, which will provide $11,500 a year for five years, will bring to almost $100,000 the amount given to projects on which Doctor Falkner is working.

The second Oklahoma Colloquy on Advances in Medicine, set for November 12-15 at the University of Oklahoma Medical Center, will be devoted to arthritis and related disorders, announces Irwin H. Brown, M.D., director of Postgraduate Education. The program has been developed by the Department of Medicine and the Division of Postgraduate Medical Education of the Center and is being sponsored by a number of pharmaceutical firms. Registration is open to all physicians at a fee of $25. Members of the Armed Forces, interns and residents may attend without charge.

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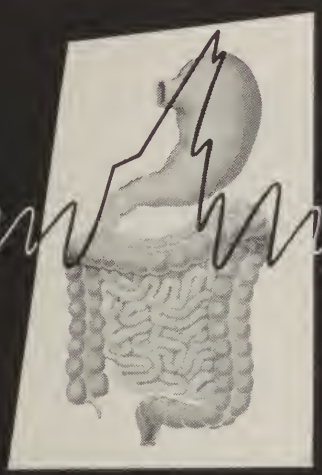
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References: 1. Drugs of Choice 1958-1959, St. Louis, C. V. Mosby Company, 1958, p. 347.
2. Goldsmith, J. W.: Minnesota Med. *40*:99 (Feb.) 1957.

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Usual adult dosage is 2 capsules q.i.d.

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FINNERTY, F. A., Buchholz, J. H. and Tuckman, J.: J.A.M.A. **166**:141, Jan. 11, 1958.

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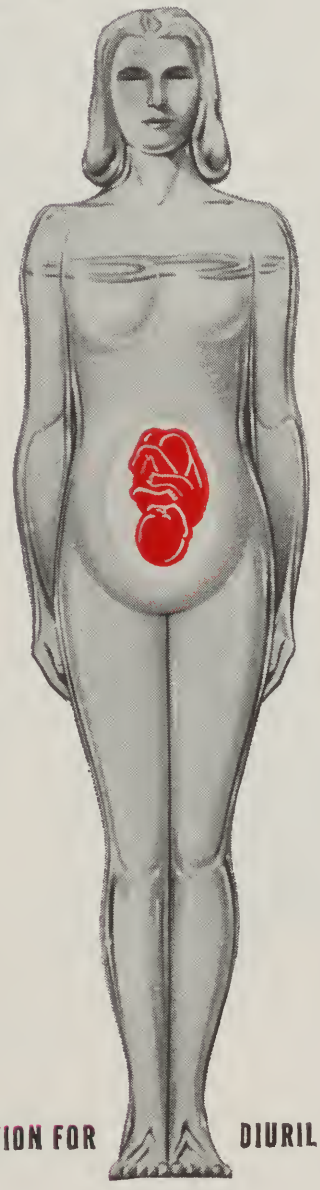
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references:
1 Grieble, H.G., and Jackson, G.G.: Prolonged Treatment of Urinary-Tract Infections with Sulfamethoxypyridazine. *New England J. Med.* 258:1-7, 1958
2. Editorial: *New England J. Med.* 258:48-49, 1958.

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References: 1. Spies, T. D., et al.: J.A.M.A. 159:645, 1955. 2. Spies, T. D., et al.: Postgrad. Med. 17:1, 1955. 3. Gelli, G., and Della Santa, L.: Minerva Pediat. 7:1456, 1955. 4. Guerra, F.: Fed. Proc. 12:326, 1953. 5. Busse, E. A.: Clin. Med. 2:1105, 1955. 6. Sticker, R. B.: Panel Discussion, Ohio State M. J. 52:1037, 1956.

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'DIURIL

(CHLOROTHIA)

FORD, R. V., Rochelle, J.B.III, Handley, C. A., Moyer, J. H. and Spurr, C. L.: J.A.M.A. **166**:129, Jan. 11, 1958.

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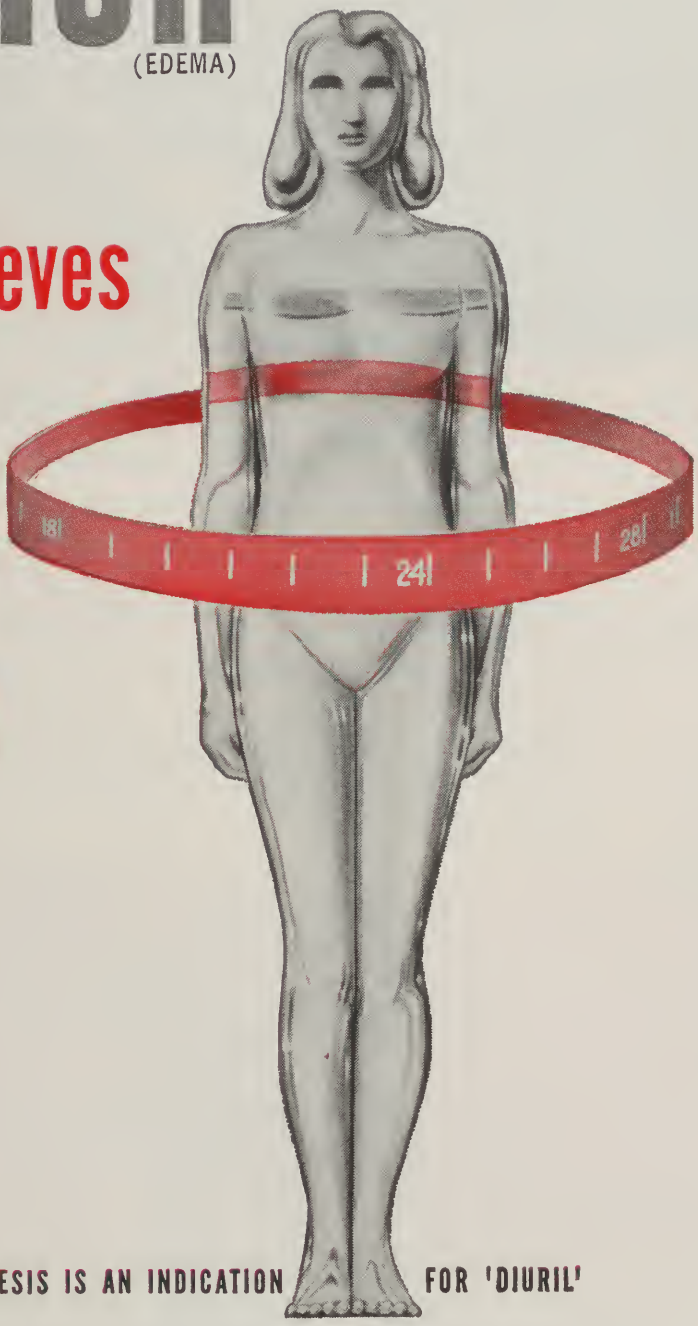
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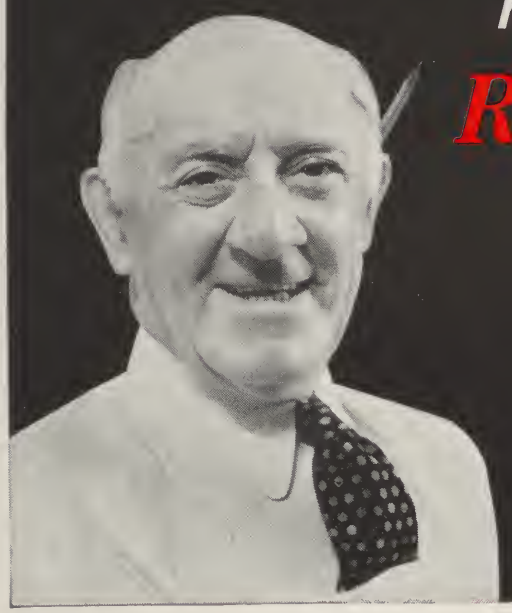
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Journal of the Kentucky State Medical Association, October 1958

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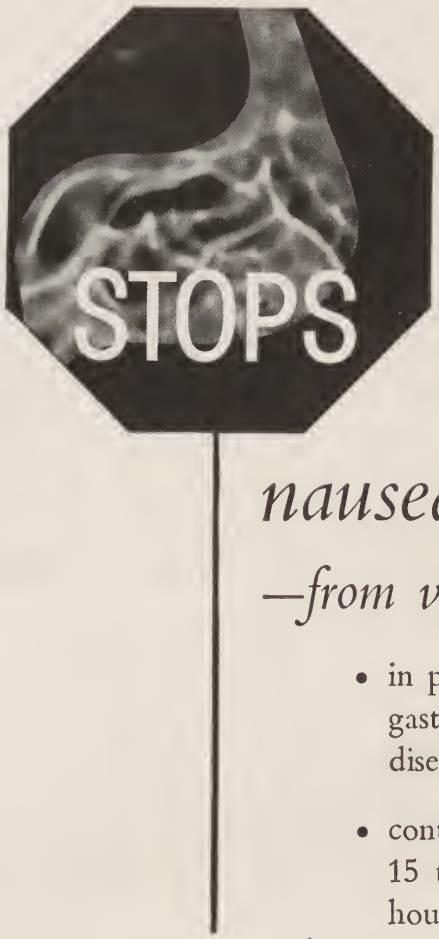
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The Staphylococcal Problem

Cryptococcus Meningitis

The Allergic Child

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(1) Hagedorn, A. B.: Proc. Staff Meet. Mayo Clin. **32**:705 (Dec. 11) 1957.
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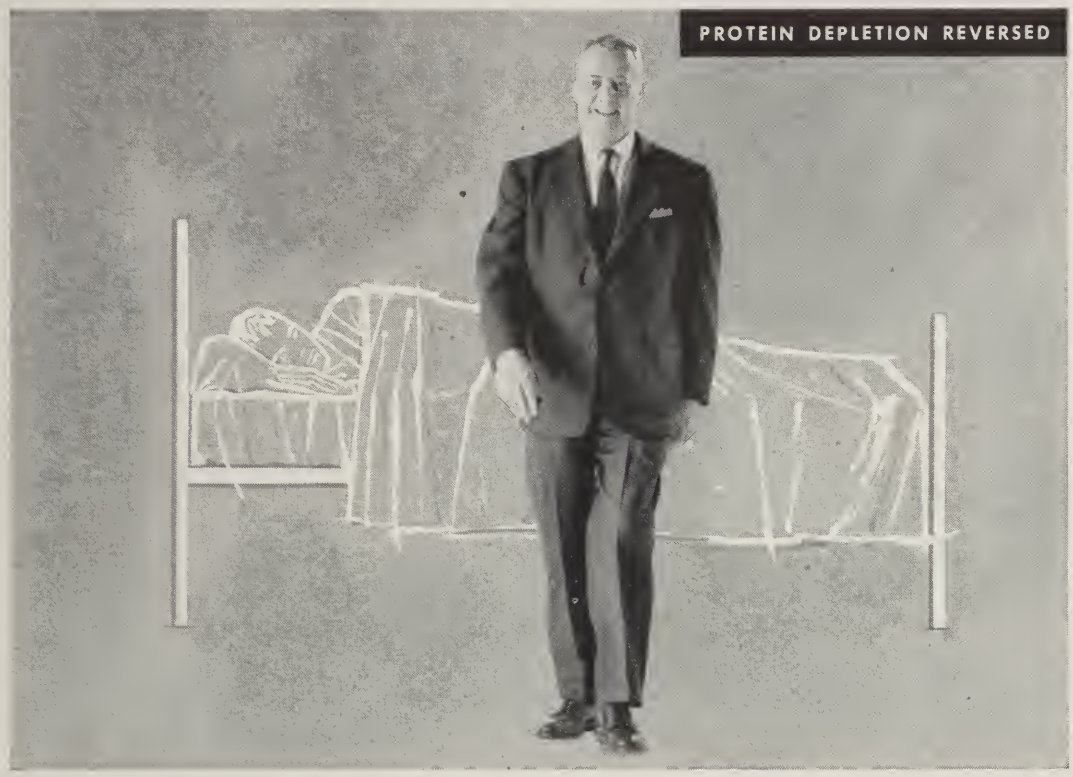
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message from the President

Need for Wise Selection

THIS is the time of year when most County Medical Societies will begin to consider selecting officers to lead their societies in the coming year. It seems appropriate to have your November President's Page deal with this subject.

These are critical days for medicine, and the best leadership at the county level is of utmost importance. Let me urge you to select the best possible talent for Secretary.

You will recall that several years ago the KSMA House of Delegates recommended that our county medical societies not change secretaries annually, but keep a capable man in this office for a period of three years. Do not let your society be guilty of pushing the secretaryship on to each young and inexperienced doctor that comes into your community.

The House of Delegates most assuredly and overwhelmingly recognized the need of expanding the legislative program of the Association, the postgraduate program, physician placement service, and public service programs, when it authorized the increase in the annual dues.

The degree to which the Association will be successful in expanding these projects will depend upon the cooperation and implementation given by leaders of the county medical societies. So again let me stress the *need for wise selection* of county officers for the coming year.

Robert W. Roberton

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IN THE BOOKS



Books Received

Following is a list of books received by the Association for review. Those considered of particular interest to Journal readers will be reviewed as space permits. All complimentary copies of books received are turned over to the University of Louisville-Jefferson County Medical Society Library. Inquiries concerning a particular book should be made to the KSMA Headquarters Office, 1169 Eastenr Parkway, Louisville 17, Ky.

Callander's SURGICAL ANATOMY: by Barry J. Anson, M. A., Ph. D., and Walter G. Maddock, M. S., M. D.; published by W. B. Saunders and Company, Philadelphia and London.

EMERGENCY TREATMENT AND MANAGEMENT: by Thomas Flint, Jr., M. D.; published by W. B. Saunders Company, Philadelphia and London.

REHABILITATION MEDICINE: by Howard A. Rusk, M.D.; published by C. V. Mosby Company, St. Louis.

ENDOCRINE PATHOLOGY OF THE OVARY: John McLean Morris, M.D., and Robert E. Scully, M.D., published by C. V. Mosby Co., St. Louis, Mo., 1958; 151 pages; 75 illustrations; price, $8.50.

Certainly, every large medical library will want to add this book to their shelves. Many pathologists, gynecologists, endocrinologists, and other specialists with particular interest in functional ovarian tumors will benefit by having such a volume constantly at their fingertips It is doubtful that the bulk of practicing clinicians will see fit to purchase a copy.

The subject is covered well. Reported cases are tabulated. It is apparent that it is most difficult to draw sharp lines in regard to classification of such tumors, and to make a precise diagnosis is not always possible. New and unreported cases are added to the literature.

The publisher states there are 75 illustrations. The statement is true, however, all are black and white photomicrographs. The quality of reproduction is good, but it is disappointing not to find one beautiful colored photomicrograph. In our age of technicolor films and color television we expect to see at least one such illustration in such a text. For the student, the absence of color reduces the teaching value of the picture. The cost of such reproductions is much greater than black and white, yet perhaps some day a few more color plates will be added to illustrate the microscopic pathology.

One might anticipate a number of photographs of patients and gross pathology in a text such as this, but none are to be found. Many such illustrations are available in other texts, but wouldn't it be nice to see what the words describe without turning pages in another book?

The quality of the paper is excellent and the binding leaves nothing to be desired. The printing is sharp and makes for easy reading. The number of references is more than adequate for those who wish to read more about this subject.

M. V. Hanes, M.D.

CLINICAL GASTROENTEROLOGY: by Eddy D. Palmer, M.D., F.A.C.P., published by Paul B. Hoeber, Inc., New York, 1957, 630 pages, price $18.50.

In his preface the author states that this is a presentation of gastroenterology as a clinical subject, intended for the consideration of those whose main interest is bedside medicine. He further states that "no iconoclastics are intended, but some stands are taken which reflect the new divergence of thinking currently observable through the whole framework of gastroenterology." Despite the foregoing the treatment *is* quite iconoclastic in some sections. With this point of view this reviewer is thoroughly sympathetic; especially he would "admit freely that we are not doing as well in our understanding and treatment of gastrointestinal diseases as the writings of a less secure era seemed to suggest."

However, especially when he embarks upon such a course, it is an important obligation of any author to document adequately his conclusions and recommendations. For example, in the treatment of uncomplicated active duodenal ulcer he recommends that no dietary treatment or medications be prescribed, that use of coffee, alcohol and tobacco "in normal moderation" need not be restricted; full reliance is placed upon concentration "realistically on the patient's emotional problems through interview therapy . . . for permanent help and even hope of cure . . ." It would not seem unreasonable for the reader to be critical, even if his main interest is bedside medicine, and to expect documentation in concrete terms of the results obtained from such a radical departure from conventional therapy. In what proportion of such patients can "permanent help" from such a regimen be expected? How many patients has he treated by this means and for how long has he followed them in order to ascertain that "permanent help" has been obtained? How do the results compare with those obtained with treatment of a similar group by the usual means as controls? It is disappointing to be unable to find the answers to these and other pertinent questions. If the reader were interested in pursuing the matter further he would find little assistance from the bibliography. Throughout the book many of the bibliographies are somewhat inadequate in citation of those key references that might provide a short cut to the literature available concerning a particular topic.

(Continued on page 1154)

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PUBLIC HEALTH PAGE

Mass X-Ray in Kentucky

RUSSELL E. TEAGUE, M.D.
Commissioner of Health
Commonwealth of Kentucky

It has been the policy of Kentucky county health departments and chest X-ray mobile units in tuberculosis casefinding programs to urge and make X-ray films for the general public over age 15, regardless of probable exposure to the disease. This policy is being revised according to the suggestions of the Surgeon General of the United States Public Health Service, Leroy E. Burney. It was the opinion of Dr. Burney's staff that since the people of this country are now more likely to be exposed to mild radiations from several sources, it would be wise to limit annual chest X-rays to persons in the older age groups and to persons more likely to have been exposed to tuberculosis.

Thus, it has been decided by Kentucky public health personnel to be more selective in the "mass" X-ray programs, not only because of a possible radiation hazard—which is still only of tentative concern—but also because of the greater expense and lower efficiency of X-raying all who wish it.

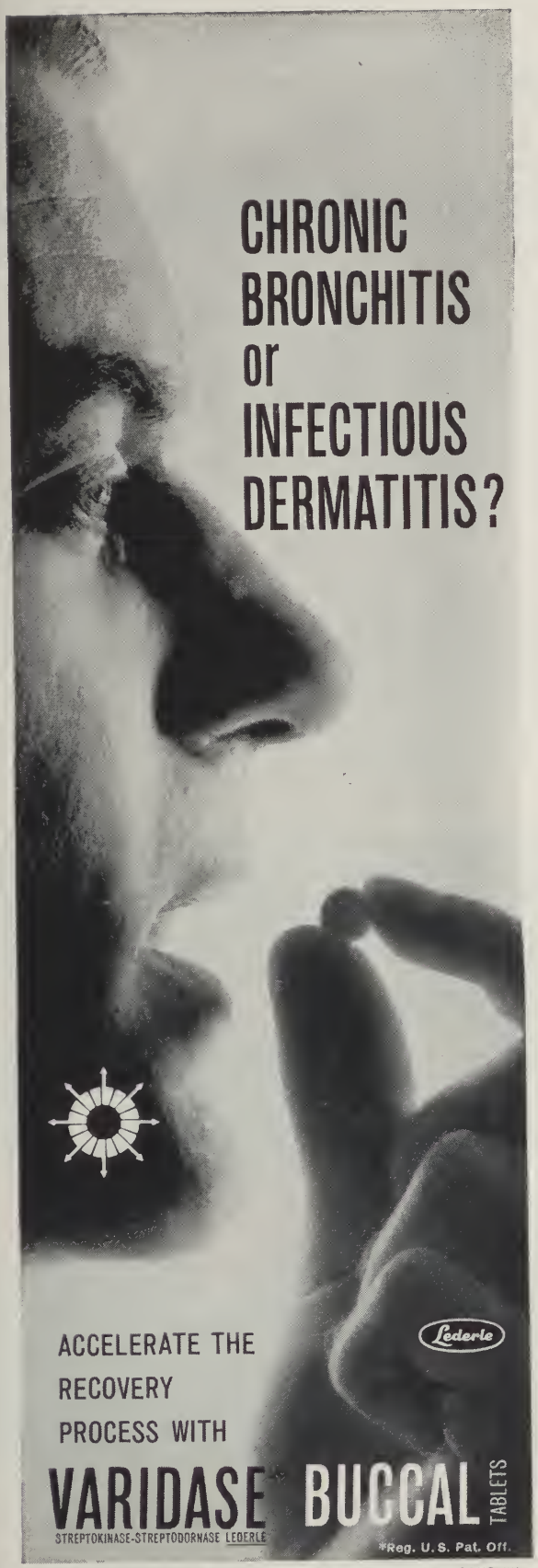
Under the new policy more efficient operation is expected, in that mobile X-ray units will visit counties much more frequently and attempt to X-ray individuals among whom tuberculosis is more likely to occur—such as suspects, family contacts of known cases, industrial workers not previously surveyed, people in slum areas, low income groups, and general population in older age groups. The following recommendations have been sent to all county health departments:

1. Diagnosed cases of tuberculosis in any age group should be X-rayed annually or as indicated.
2. No individual under 20 years of age or pregnant women will be X-rayed without a prior intradermal tuberculin test that is positive. The exception to this will be patients referred by private physicians for other chest diseases.

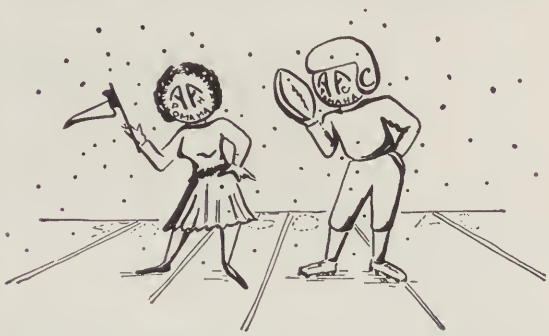
As persons grow older the radiation hazard is decreased while the danger of tuberculosis is increased. Therefore, the following recommendations have been made concerning age groups:

0-19	X-ray only with positive intradermal skin test; if X-ray is positive, re-X-ray as physician requests.
20 & over	Annual X-ray

As has been the policy previously, the copies of chest X-ray reports sent to county health departments are for record only. These reports indicate tuberculosis suspects needing a further examination, or if on known cases, serve as a basis for a follow-up report. These X-ray reports, being in technical language, are best explained to the patient by his physician; they will not be given, either verbally or in writing, to the patient or his family by health department personnel other than the health officer. The family physician will continue to receive notification of suspected chest disorders among his patients, and he will enter further into the revised program by authorizing X-rays when necessary for persons under 20 or for known cases. Physicians, public health workers, and especially the citizens who benefit directly from the selective system of X-raying will be better served by the new program.



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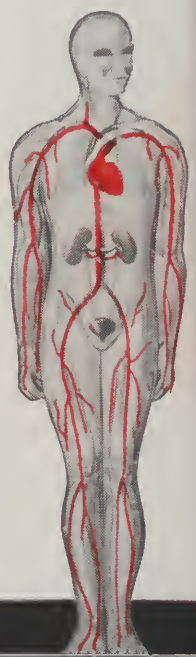
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Wilkins, R. W.: New England J. Med. **257:1026,** Nov. 21, 1957.

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Freis, E. D., Wanko, A., Wilson, I. H. and Parrish, A. E.: J.A.M.A. **166:137,** Jan. 11, 1958.

"Chlorothiazide (maintenance dose, 0.5 Gm. twice daily) added to the regimen of 73 ambulatory hypertensive patients who were receiving other antihypertensive drugs as well caused an additional reduction [16%] of blood pressure." "The advantages of chlorothiazide were (1) significant antihypertensive effect in a high percentage of patients, particularly when combined with other agents, (2) absence of significant side effects or toxicity in the dosages used, (3) absence of tolerance (at least thus far), and (4) effectiveness with simple 'rule of thumb' oral dosage schedules."



In "Chlorothiazide: A New Type of Drug for the Treatment of Arterial Hypertension,"
Hollander, W. and Wilkins, R. W.: Boston Med. Quart. 8: ., September, 1957

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2 **ADJUST DOSAGE OF OTHER AGENTS.** The dosage of other antihypertensive medication (reserpine, veratrum, hydralazine, etc.) is adjusted as indicated by patient response. If the patient is established on a ganglionic blocking agent (e.g., 'INVERSINE') this should be continued, but the total daily dose should be immediately reduced by as much as 25 to 50 per cent. This will reduce the serious side effects often observed with ganglionic blockade.

3 **ADJUST DOSAGE OF ALL MEDICATION.** The patient must be frequently observed and careful adjustment of all agents should be made to determine optimal maintenance dosage.

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mooth, more trouble-free management of hypertension with 'DIURIL'

From the Files of the

Committee for the Study of Maternal Mortality

CASE 21: This patient was a 40-year-old married white gravida 10, para 3, ab 6. Her LNMP was May 1, 1957. By menses she was due February 8, 1958.

Past History: She had been married twice and was known to have a "fibroid uterus." She had one living child, her first pregnancy at age 22; one stillborn in 1945; and one that was born alive, but died of pneumonia when three days old. The patient had five or six abortions, occurring at 3 to 5 months—the last, two years ago at 4½ months. She had an appendectomy in 1946 and "milk leg" in 1938.

Her menses had been regular, with the last period beginning May 1. About seven weeks after this period she began flooding and passed several large clots that were described as looking like liver. This continued 3 or 4 days. She consulted an M.D. in another town on July 14, 1957.

A pregnancy test was done and reported as positive at the time. The patient was referred from this M.D. because of the bleeding and she was admitted to the hospital on July 21, 1957. She had a "rather profuse hemorrhage" 10 hours before admission to the hospital.

The fetus, described as approximately three months' size, plus some placental tissue were passed spontaneously at 2:30 a.m. on July 22. However, the bleeding continued excessively with passage of pieces of placenta. The impression was an incomplete abortion. She was transfused at 4:30 a.m. After the blood was absorbed, the patient's temperature was 102.2 and she complained of generalized aching and was apprehensive. She coughed up blood streaked phlegm but her husband said she had had a respiratory infection.

At 5:00 a.m. a D and C was done under cyclopropane anesthesia. The uterus remained "large and hard" after the procedure and was still bleeding after a uterine pack was inserted. She lost an estimated 500 cc. of blood during the procedure.

At 7:30 a.m. she again began to bleed and her BP dropped to 70/50. An IV was given (what this was wasn't stated), and the pressure was 80/50 with less bleeding. More blood was started at 9:45 a.m. Her BP then was 100/60 and she complained of nausea and vomiting. More blood was given at 11:40 a.m. At 2:00 p.m. her BP was 118/82, temperature 104, pulse 108, respirations 32.

At 10:40 p.m. her BP dropped to 64/54, ephedrine was given and she had very little bleeding. By 11:30 p.m. her BP was 82/52, her temperature 98°, pulse slower, and the fundus firm. She had passed no urine. She was catheterized and 30 cc dark brown urine was obtained. Her BP remained above 100 the rest of the night and was as high as 116/58.

The next day the patient was feeling good and taking fluids, although she was still anuric. Her BP at 12:30 p.m. on July 23 was 110/70. The vaginal packing was removed at 1:30 p.m. and at 1:50 p.m. profuse vaginal bleeding started. Her BP dropped to 72/50. Ergotrate and ephedrine were given plus uterine massage and the BP stabilized between 90-100 by 2:45 p.m. However, she again began to bleed and uterine massage was not effective. More blood wasn't available, so dextran was started through the femoral artery, IV plus 20 mg. premarin and adrenosim, more ergotrate plus solu-cortef with dextrose.

Blood was started under pressure at 4:05 p.m. It was then discovered that when the patient was retyped she was found to be B— and all the blood she had received was B+. The blood was stopped and only the IV with solu cortef was continued. However, the patient moved and this infiltrated.

At 4:55 p.m. she became much worse. She again had profuse bleeding and the uterus was large and boggy. She had air hunger. 0_2 was started. A cut down was done with dextran running since no blood was available, but she expired at 5:15 p.m. on July 23, 1957. There was no autopsy.

Comment

In retrospect, this death must be classified as preventable. Certainly the laboratory error resulting in the incompatible blood being administered was preventable. It is difficult to say that this alone accounted for the uncontrollable bleeding following the D and C. Rather, it would seem a combination of factors; notably the known fibroids possibly impairing the musculature to close off the sinuses, as well as making the D and C technically more difficult. Actually, some of the placenta might have been inadvertently left in the corpus, since she had profuse bleeding when the uterine packing was removed.

Had the symptoms of transfusion reaction been recognized and caught early, possibly the second transfusion later that morning would have been compatible. Then, if she continued to bleed, hysterectomy would have been the only other recourse.

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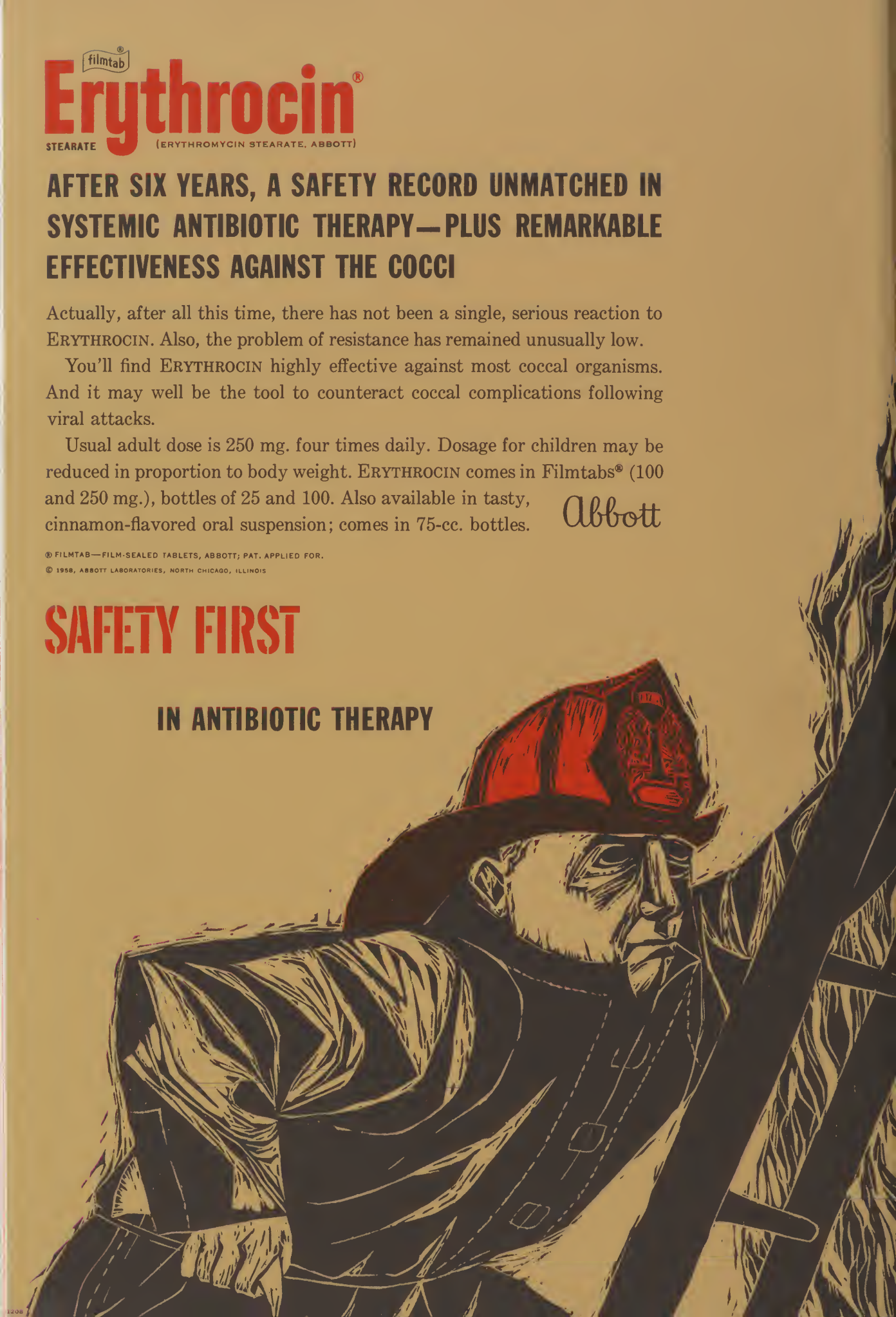
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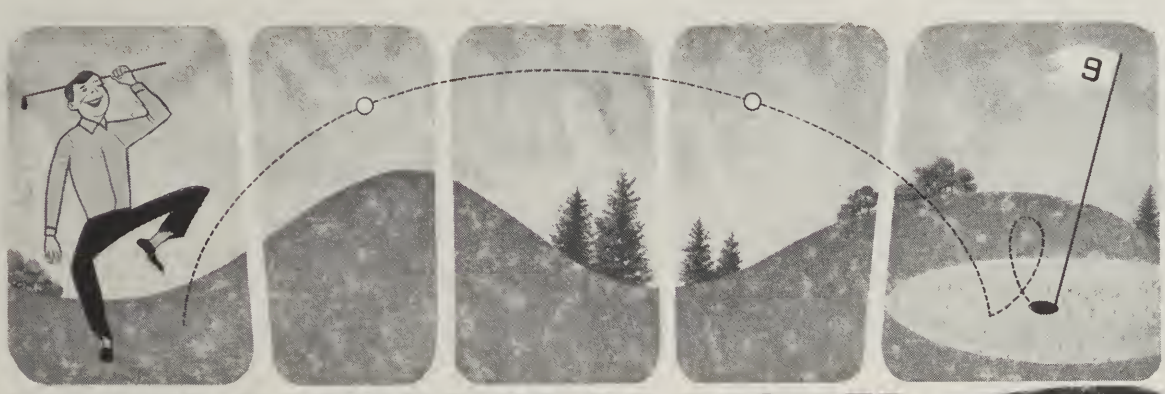
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WASHINGTON NEWS DIGEST

Washington, D. C.—For many years a number of students of government have been searching for some way of checking the growth of the Federal bureaucracy and returning certain functions to the states.

Two particularly vexing problems are involved. Because the Federal government has moved into so many taxation areas, states complain that even if they wanted to regain control over certain programs, they would have no way of paying for them. Also, a fool-proof mechanism would have to be devised to insure that the programs didn't break down during the transition and that the states would in fact keep up the activities after U. S. dollars stopped coming.

If the administrative details could be worked out, and if Congress would agree to reverse the trend, a number of U. S. Public Health Service grants programs presumably could be turned over to the states.

President Eisenhower is deeply interested in attempting to turn the tide, and last year the Administration came up with a concrete proposal. It was to make the states completely responsible for the water pollution control operation ($50 million annually in U. S. grants) and vocational education ($35 million a year). So the state would have money to finance the work, the U. S. would drop part of its tax on telephone service, inviting the states to levy their own tax.

Congress was cool to the idea. Besides, after giving it more consideration, the then Secretary Folsom of HEW decided it wouldn't work because the low-income states couldn't realize enough from the telephone tax to meet the extra expenses.

But the Administration hasn't given up hope. Supported by the federal-state joint action committee, Secretary Flemming (Folsom's successor) is proposing a new method, one that he thinks will meet the problem of the low income states.

He would shift to the states the same two programs—water pollution control and vocational education. At the same time the U. S. would forego 30% of the present tax it imposes on telephone service and permit the states to levy this amount. In addition, to take care of the poor states the U. S. would allocate among states an amount equal to 10% of the present telephone tax, distributing relatively larger shares to the low per capita income states.

In dollars, as explained by Secretary Flemming, the states would be losing $85 million in U. S. grants, but they would have an opportunity to collect a total of about $109 million on telephone service and receive $36 million in the new grant arrangement.

In announcing that the Administration was going to try again to have this idea adopted, Mr. Flemming emphasized that both programs were of great value and shouldn't be allowed to "drop through the cracks in the floor" during the period of transition. He noted that under his proposal the U. S. could step in and make a state use the money for the specific purpose if it showed an inclination to collect the tax but spend the money somewhere else.

The question now is whether Congress will show any enthusiasm over the plan. At any rate, it will be opposed vigorously by the telephone industry and vocational education interests. The latter are fearful that their programs might suffer under all-state operation.

Notes

HEW is giving careful study to the Bayne-Jones report which proposed a doubling of U. S. medical research spending and early construction of 14 to 20 medical schools. Secretary Flemming told a press conference that final estimates of the cost of carrying out some of the report's proposals are due to be finished in December.

*** ***

Social Security Administration reports a sharp rise in volume of appeals from applicants denied social security benefits, mostly under the disability section enacted two years ago. The administration's staff of referees has been increased four-fold in two years to handle the work load. Three times as many hearings are held on disability claims as on all others combined.

*** ***

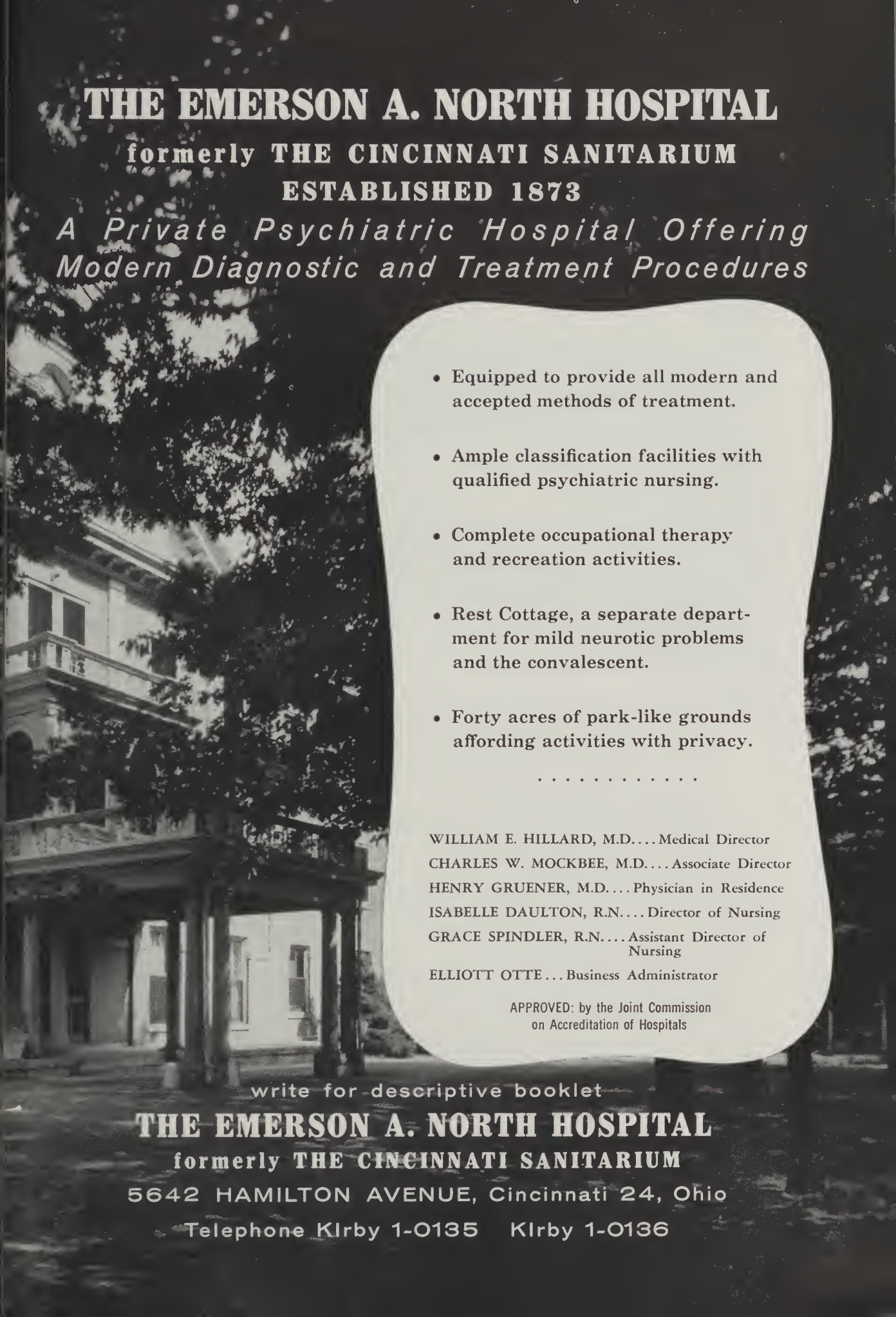
Social Security Commissioner Charles I. Schottland, back from a month's tour of Russia, reports that nurseries and old people's homes in Russia appear to be "excellently" staffed with one employee for about every three old persons and one for every two and a half children. He points out that a comprehensive social security program is a must in Russia, inasmuch as wages are about the only source of income. When wages halt, the people have only social security to fall back on.

*** ***

With President Eisenhower's appointment of General Elwood R. Quesada as administrator of the new Federal Aviation Agency, the American Medical Association is renewing its plea for an Office of Civil Aviation Medicine manned by a Civil Air Surgeon.

*** ***

Mounting protests from medical and other groups have persuaded the Post Office Department to drop its plan to ban the airmail shipment of etiological disease agents. Airlines felt there was a threat of breakage and possible danger to crews and plane passengers. PHS, the AMA and others argued that proper packaging could control this problem.



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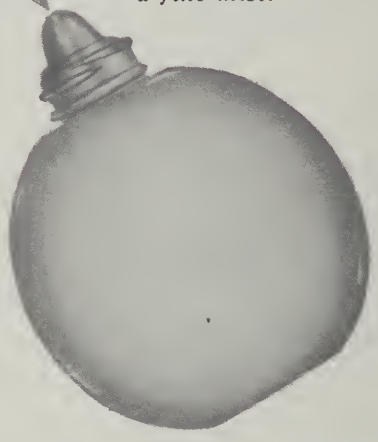
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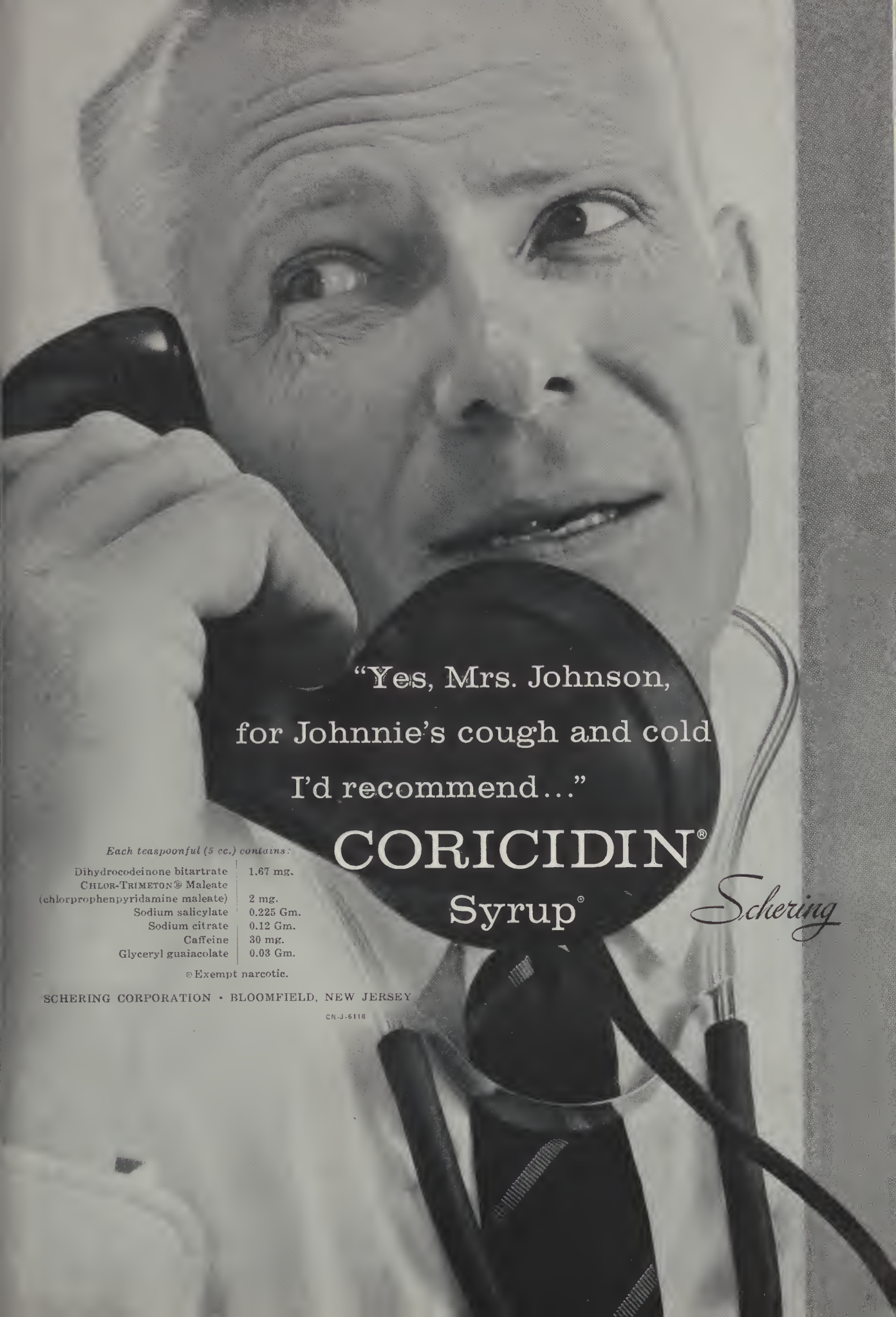


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ENCES: 1. Carlozzi, M.: Ant. Med. & Clin. Therapy 5:146 (Feb.) 1958. 2. Welch, H.; Wright, W. W., and Staffa, A. W.: Med. & Clin. Therapy 5:52 (Jan.) 1958. 3. Marlow, A. A., and Bartlett, G. R.: Glucosamine and Leukemia. Proc. Soc. Biol. & Med. 84:41, 1953. 4. Shalowitz, M.: Clin. Rev. 1:25 (April) 1958. 5. Nathan, L. A.: Arch. Pediat. 75:251 (June) 6. Cornbleet, T.; Chesrow, E., and Barsky, S.: Ant. Med. & Clin. Therapy 5:328 (May) 1958. 7. Stone, M. L.; Sedlis, A., ord, J., and Bradley, W.: Ant. Med. & Clin. Therapy 5:322 (May) 1958. 8. Harris, H.: Clin. Rev. 1:15 (July) 1958.

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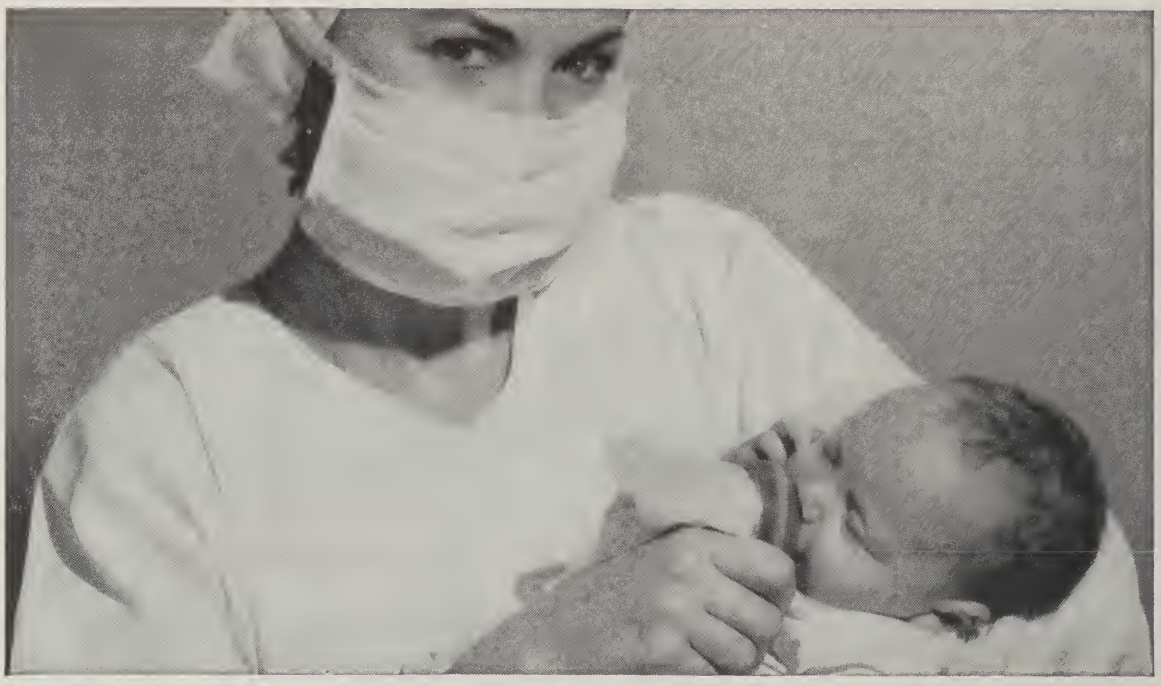
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Age Months	Whole Milk Fluid Oz.	Water Oz.	Karo Syrup Tbsp.	Each Feeding Oz.	Number of Feedings in 24 Hours	Total Calories
Birth	10	10	2	3	6	320
1	12	13	3	4	6	532
2	15	13	3	4½	6	480
3	17	9	3	5	5	520
4	20	11	3½	6	5	610
5	23	11	4	6½	5	700
6	26	10	4	7	5	760
7	28	11	3	7½	5	740
8	30	11	2½	8	5	750
10	32	9	2	8	5	760
12	32	9	0	8	5	640

EVAPORATED MILK FORMULAS

Age Months	Evaporated Milk Fluid Oz.	Water Oz.	Karo Syrup Tbsp.	Each Feeding Oz.	Number of Feedings in 24 Hours	Total Calories
Birth	6	12	2	3	6	380
1	8	16	3	4	6	532
2	9	14	3	4½	5	576
3	10	15	3½	5	5	650
4	12	18	4	6	5	768
5	12	21	4	6½	5	768
6	13	22	4	7	5	812
7	14	21	3	7	5	796
8	15	20	2	7	5	780
10	16	16	1	8	4	764
12	16	16	0	8	4	704

When a feeding problem is in the making, sensible decorum will solve it. Nature invites infant feeding cooperation through hunger. If hunger is appeased on demand rather than by clock there will be fewer problems—the baby is the best judge of when he wants food and how much.

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Meprobamate As A Pre-Treatment Drug For Electroshock Treatment*

WILBER A. MITCHELL, M.D.**
Louisville, Ky.

ANXIETY and the fear of death have been associated with the use of electroshock treatment since its inception.[1, 2] These factors are responsible for the gradual evolution of the treatment procedure from the brutal method of physically restraining struggling, frightened patients in front of their fellow in-mates to the present day method of isolating them from the group. In spite of this progress, patients still resist the "cure" and their feelings concerning treatment will continue to modify the procedure.

At Central State Hospital, Lakeland, Ky., the use of a rapidly acting barbiturate and a muscle relaxant was part of the routine treatment program, but still there was considerable tension and excitement on "EST-day." Presedation with other barbiturates was beneficial but tended to prolong the post-treatment recovery phase, and the use of such tranquilizing agents as the phenothiazine drugs and reserpine were contra-indicated in the pre-treatment phase because of the possibility of serious complications.[3, 4, 5, 6] Thal[7] used meprobamate as a pre-medication drug for EST on patients who were treated without the use of anesthetics or muscle relaxants, and found it to be compatible with his treatment process.

According to most of the available literature, meprobamate has relatively little effect on autonomic functions. It is supposed to have a selective action on the long interneuronal circuits between the cortex, thalamus and hypothalamus,[8] and has been found successful in relieving symptoms associated with anxiety and tension states.[9, 10, 11]

In experiments at our hospital, meprobamate was found to be compatible with the current procedure for electroshock treatment. In order to eliminate the possible interference of personnel enthusiasm for a new drug it was decided to conduct a controlled double-blind study on schizophrenic patients undergoing EST.

Procedure

The experiment was set up using sixty patients, half to receive meprobamate† and the other half a placebo. This was done through the use of a code, with the medication being dispensed by our pharmacist in individual bottles for each patient. Through chance occurrence 19 men and 9 women received meprobamate and 11 men and 20 women were given the placebo. The average age of the male patients was 37.9 years for the meprobamate group and 30.0 for the placebo group, as contrasted to 41.7 and 44.5 years for the women's groups.

The test group was chosen from patients on the acute treatment wards, 80% being newly-admitted schizophrenic patients who had never received EST before. Their only knowledge about its effects was such information as may have been relayed to them by other patients. They were not told of the nature of the experiment but knew of their participation in "research." The test group for each day was limited to about 15 patients because of the multiplicity of data obtained, causing the total experiment to stretch over a five month period of time.

*From the Department of Psychiatry, University of Louisville School of Medicine.

**Resident in Psychiatry, University of Louisville School of Medicine.

†The meprobamate was supplied by Wyeth Laboratories as Equanil.

Each patient was given either two meprobamate tablets (800 mgms.) or two placebos each morning before treatment, with blood pressure, pulse and respiratory rate being recorded at that time. These measurements were repeated at half-hour intervals. At the same time, behavior was noted according to a pre-selected graduated scale which interpreted motor activity, degree of free-floating anxiety, amount of verbalized fear and expression of psychophysiological symptoms. All patients received 1/50 gr. of atropine intra-muscularly, 90 minutes after the meprobamate or placebo and were taken to the treatment room at the end of the two hour waiting period. They were then put to sleep with 250 mgms. of Surital® intravenously, then given 20 mgms. of Anectine® intravenously which was followed by a modified convulsive type treatment. The number of individual treatments given to each patient varied from two to thirty, depending upon the response.

Results

There was considerable variation in the daily blood pressure and pulse rate recordings of ambulatory patients whose activity was not regulated. In essence these were spot checks on autonomic lability as measured by these physiological measurements. It was impossible to observe any consistent trend during the course of the experiment, and I was never able to guess which patients were receiving meprobamate. Even after the code was broken, statistical analysis was necessary to determine the effectiveness of the drug.

Because of the wide variability in the patients' daily physiological observations, the readings taken at the time of drug ingestion were used as the base lines for comparative purposes. The degree of change from each day's base-line was considered to be a reflection of the effectiveness of the drug. The data were tabulated separately for the men and women because of their different responses. At the inception of the project it was feared that the cumulative effects of EST confusion would produce a change in the relative anxiety of the patients but this feeling was not substantiated. No difference was observed between the first, fifth, tenth or fifteenth treatment.

Physiological Observations

The blood pressure and pulse rates were compared statistically at 60, 90 and 120 minutes after drug intake. (See Chart No. 1.) The pulse rates for the men showed an increase in the placebo group which was higher than that seen in the meprobamate group at all the above periods of time. At 60 minutes after ingestion of the placebos the mean pulse rate was 6.1 points higher than for the meprobamate group, and after 90 minutes this difference was only 4.3 points. These values are significant at the 1% level of chance variation. After 120 minutes the mean pulse rate for the placebo group was 3.2 points higher than the rise for the meprobamate group, which was of no significance.

The mean pulse rates for the women varied considerably from those of the men. The 60 and 90 minute recordings were not significantly different from each other, but 120 minutes after drug intake the mean pulse rate rise of the female meprobamate group was 6.1 points lower than the placebo group, which was significant at the 5% level of chance variation.

The systolic and diastolic blood pressures of the male and female meprobamate groups were recorded for the 60- and 90-minute periods with both groups showing a rise in pressure statistically significant from the rise seen in the placebo groups. Ninety minutes after drug intake the mean systolic pressure rise of the male placebo group was 4.8 mm. of Hg., as compared to a rise of 1.2 mm. of Hg. in the meprobamate group. The rise for their respective mean diastolic pressures were 3.3 and 0.7 mm. of Hg. We found a slightly larger difference between the female groups. After 90 minutes the meprobamate appeared to produce an average reduction in both systolic and diastolic pressure (4.4 mm. of Hg. systolic and 1.4 mm. of Hg. diastolic), while the placebo group rose 5.1 mm. in mean systolic pressure and 3.7 mm. of Hg. diastolic pressure.

The difference in the responsiveness between the sexes may be due to the fact that on the average the women received a larger dose of meprobamate per kilogram of body weight than did the men. While most of the results obtained were statistically different when the entire group was compared, they have relatively little medical significance. The findings of this study tend to confirm the reports of others that meprobamate has relatively little effect on blood pressure and pulse rate.[11, 12]

Behavioral Observations

The patients' behavior while in the pretreatment room was observed and recorded

Chart No. 1

PHYSIOLOGICAL OBSERVATIONS

SEX	TIME AFTER DRUG INTAKE	MEPROBAMATE GROUP Mean rate	Change	PLACEBO GROUP Mean rate	Change	DIFFERENCE	STANDARD ERROR	T-VALUE
		PULSE RATE						
MEN	0	93.1		89.1				
	60 Min.	98.8	5.7	100.9	11.8	6.1	1.8	3.4**
	90 Min.	105.6	12.5	105.9	16.8	4.3	1.7	4.3**
	120 Min.	108.1	15.0	107.3	18.2	3.2	2.5	1.3
WOMEN	0	87.0		92.0				
	60 Min.	98.6	11.6	100.2	8.2	3.4	2.3	1.5
	90 Min.	94.0	7.0	100.4	8.4	1.4	2.2	0.6
	120 Min.	93.3	6.3	104.4	12.4	6.1	2.6	2.3*
		SYSTOLIC BLOOD PRESSURE (mm. of Hg.)						
MEN	0	117.6		109.3				
	60 Min.	119.0	1.4	113.8	4.5	3.1	1.4	2.3*
	90 Min.	118.8	1.2	114.1	4.8	3.6	1.7	2.1*
WOMEN	0	115.0		109.0				
	60 Min.	114.2	-0.8	115.5	6.5	7.3	1.7	4.3**
	90 Min.	110.6	-4.4	114.1	5.1	9.5	2.1	4.7**
		DIASTOLIC BLOOD PRESSURE (mm. of Hg.)						
MEN	0	76.3		70.3				
	60 Min.	76.0	-0.3	73.4	3.1	3.4	1.0	3.2**
	90 Min.	77.0	0.7	73.6	3.3	2.6	1.3	2.0*
WOMEN	0	72.4		70.4				
	60 Min.	72.9	0.5	74.4	4.0	3.5	1.2	2.8**
	90 Min.	71.0	-1.4	74.1	3.7	5.1	1.4	3.6**

* Significant at the 5% level of chance variation. ** Significant at the 1% level of chance variation.

along with the physiological measurements. The effectiveness of these observations necessarily depended upon the acumen of the individual recorders.

Any unnecessary movement thought to be produced by anxiety, such as fiddling with clothing, moving to and fro, or pacing up and down the room, was considered to be abnormal. The results were tabulated according to the percentage of times this increased activity was observed. (See Chart No. 2.) The average motor activity of the men showed an increased response 46% and 48% of the times, while the women had an increase in activity 36% and 40% of the times. These findings seemed to indicate that the men walked up and down more than the women, but the variation seen was not significant statistically when compared as to sex or as to effectiveness of meprobamate over the placebo.

The same method of approach was used with the degree of fear expressed as overt anxiety and the increase in verbal productivity due to fear. The presence of restless movements, acting afraid, apprehension or agitation was considered as an expression (or release) of free-floating anxiety. An increase in verbalization of fear occurred whenever the patient discussed treatment effects, worried about it, or expressed fear of the needles.

The ability of meprobamate to reduce fear is shown strikingly in the results seen in the female patients at the end of the 2-hour waiting period. Women who had received the placebos showed an increase in tension and apprehension 44.4% of the times as compared to 26.4% who received meprobamate. In a similar fashion, 36.5% of the placebo group talked about fear of treatment, while only 20.4% of the meprobamate group tended to discuss treatment effects. These findings are significant at the 1% level of chance variation.

Psychosomatic symptoms were tabulated according to the body system involved. Any complaint such as nausea, palpitations, headache or fatigue, was considered abnormal. Again it was the women who showed a statistical variation both in the effectiveness of meprobamate in reducing the number of symptoms, and in the general finding of having more complaints than

Chart No. 2

BEHAVIORAL OBSERVATIONS

(Reported as the per cent of times patients showed an increased response)

SEX	TIME AFTER DRUG INTAKE	MEPROBAMATE GROUP	PLACEBO GROUP	DIFFERENCE	STANDARD ERROR	T-VALUE
		MOTOR ACTIVITY				
MEN	60 Min.	46.0%	47.7%	1.7%	5.6	0.3
	120 Min.	18.2	19.7	1.5	5.2	0.4
WOMEN	60 Min.	36.2	40.8	4.6	6.1	0.7
	120 Min.	25.0	31.4	6.4	6.4	1.0
		FREE-FLOATING ANXIETY				
MEN	60 Min.	40.2%	35.2%	5.5%	5.4	1.0
	120 Min.	23.0	28.0	5.0	5.8	0.9
WOMEN	60 Min.	35.0	39.1	4.1	6.3	0.6
	120 Min.	26.4	44.4	18.0	6.8	2.6**
		VERBALIZED FEAR				
MEN	60 Min.	17.8%	10.3%	7.5%	4.3	1.7
	120 Min.	12.2	21.0	8.8	5.0	1.8
WOMEN	60 Min.	19.3	25.0	5.7	5.4	1.1
	120 Min.	20.4	36.5	16.1	6.3	2.6**
		PSYCHOSOMATIC SYMPTOMS				
MEN	60 Min.	5.4%	3.1%	2.3%	2.2	1.0
	120 Min.	7.3	5.8	2.5	3.2	0.8
WOMEN	60 Min.	8.5%	18.0	9.5	4.1	2.3*
	120 Min.	4.0	17.5	13.5	4.4	3.1**

* Significant at the 5% level of chance variation. ** Significant at the 1% level of chance variation.

the men. The female meprobamate group had a physical complaint 17.5% of the times, with meprobamate causing this to be reduced to 4.0% of the times. The female meprobamate group actually showed a decrease in the use of symptom formation as the concentration of the drug increased in the blood stream. One hour after receiving the drug, 8.5% of them complained of some ache or pain, and at the end of 2 hours these symptoms were found in only 4.0% of the group. The placebo group remained stationary at a 17.5% to 18.0% positive response level during this same time period.

The results of the data gathered from the behavioral observations of the men showed no statistical difference between the two groups. The findings tended to verify the clinical and every-day observations that women under stress will talk considerably more than men and make life miserable for those around them.

Psychological Observations

A Manifest Fear Scale was devised for this experiment by the Department of Psychology.* It consisted of 24 selected questions that would indicate the presence of anxiety mediated thru fear. This test was given each patient before he was aware of being placed on the EST program, and was repeated again in the pre-treatment room on the morning of the second treatment. For this test each patient was asked to estimate by answering "none," "little" or "much," the intensity of such feelings as headache, dizziness, ringing in ears, feeling that life was in danger, smothering feeling, etc., that they were *experiencing at that moment.* This was scored as 0, 1, or 2 points per item and the summed positives made the fear scale. (See Chart No. 3.)

*(*I am indebted to B. J. Bolin, Ph.D., Chief Psychologist at Central State Hospital for permission to include this data. A comprehensive paper on this subject is to be published by him at a later date.)*

The average fear scores of both of the meprobamate groups and placebo groups did not differ significantly when obtained in the "neutral" period before EST. In the hour awaiting the second treatment however, both placebo groups were significantly higher than in the neutral period. The male meprobamate group rose from a mean score of 9.1 to 10.0, while the placebo group rose from 4.2 to 8.4. The female meprobamate group showed a different reaction from the men in that the

mean score prior to EST was 14.4 and this dropped to 8.7 on meprobamate. At the same time the female placebo group rose from 10.3 to 15.0 under the same conditions.

The results of the psychological manifest fear scale were comparable to the clinical findings obtained from the behavioral data gathered for each treatment day.

Discussion and Conclusions

The problem of establishing any controlled study with schizophrenic patients is practically insurmountable. This experiment compared only the effectiveness of meprobamate against a placebo in a specific situation, thus limiting the variables. Any broad generalization as to its usefulness would be without basis.

The wide fluctuation seen in the base-line blood pressures and pulse rates for the individual patient was difficult to interpret, since they varied as much as 30 to 60 points from one day to another on the same patient. Poor personal technique was suspected but a series of readings on our personnel under similar conditions (with the exception of giving them EST) showed considerably less variation. The possibility of increased autonomic lability with a poor homeostatic regulatory mechanism in the schizophrenic is suspected. Psychotics apparently have a sustained reaction to endogenous stressful conditions which they are unable to terminate.

I observed that if one or two of the group were disturbed, being quite active and vocal in their dislike for EST and staff personnel as well, the blood pressure and pulse rate of the entire group seemed to rise. When that person was removed from the group there was an almost universal drop in these measurements. The meprobamate group did not respond as rapidly to either situation as did the placebo group.

On many occasions the person who was sitting quietly, saying nothing to his fellow patients would have a higher rise in physiological measurements than would his more active, vocal partner. Funkenstein[13] found that psychotics who were depressed and withdrawn responded with an outpouring of epinephrine, whereas the angry paranoid type had an excessive secretion of nor-epinephrine.

This study indicated that the primary benefit from the use of meprobamate as a presedative drug with EST is in its ability to lessen the clinically observable evidence of free-floating anxiety, the verbal expression of fear of treatment and psychosomatic symptoms in women. In our previous experience women produced more actual disturbances in the pre-treatment room than did men. They required a milder stimulus to act out in this environment. In this study this acting out was reduced. They became more docile and were less complaining and argumentative while on meprobamate. The conditions alleviated by this drug are found more often in the involutional depressions than in the patients in this study group, but may also be associated with many medical and surgical conditions.

Chart No. 3

FEAR SCORES ON MANIFEST FEAR SCALE

MEN

	MEPROBAMATE GROUP	PLACEBO GROUP	DIFFERENCE	STANDARD ERROR	T-VALUE
Neutral condition	9.1	4.2	4.9	2.6	1.8
Awaiting 2nd EST	10.0	8.4	1.6	2.7	1.7
Difference	0.9	4.2	3.3	1.4	2.3*
Standard Error	3.2	2.1	1.4		
T-Value	0.3	2.0*	2.3*		

WOMEN

	MEPROBAMATE GROUP	PLACEBO GROUP	DIFFERENCE	STANDARD ERROR	T-VALUE
Neutral condition	14.4	10.2	4.2	2.5	1.3
Awaiting 2nd EST	8.7	15.0	6.3	3.6	1.8
Difference	5.7	4.8	10.5	1.4	7.8**
Standard Error	3.2	3.1	1.4		
T-Value	1.8	1.3	7.8**		

* Significant at the 5% level of chance variation. ** Significant at the 1% level of chance variation.

One can hypothesize that this drug will be effective when used as pre-sedation in the treatment of many of these illnesses. Further investigation along these lines is indicated.

Summary

The effectiveness of meprobamate (Equanil) in reducing anxiety during the pretreatment phase of electroshock treatment was tested, using 60 schizophrenic patients in a double blind study. They were observed for a two-hour period after receiving either 800 mgms. of meprobamate or two placebos while awaiting EST. The procedure included the use of intravenous Surital and Anectine followed by a modified convulsive-type treatment.

Each patient's blood pressure and pulse rate was recorded at the time of receiving the drug and at half hour intervals thereafter. The amount of motor activity, the presence of free-floating anxiety, verbal expressions of fear, and the presence of psycho-physiological symptoms were estimated at the same time. A newly devised manifest fear test was given to all patients before they were aware of their receiving treatment, and this test was repeated on the morning of the second treatment during the observation period.

The mean pulse rate and blood pressure of the meprobamate group did not rise as high as the placebo group during the stressful waiting period. The actual differences were less than 5 points, but were statistically significant, indicating that meprobamate has relatively little effect on these measurements. The drug produced no vegetative motor system complications when used with a rapidly-acting barbiturate and muscle relaxant.

Meprobamate was most effective in reducing the use of psychosomatic symptoms, verbalization of fear and the presence of free-floating anxiety. These findings were validated by both clinical observations and psychological testing. Further controlled investigations of the use of this drug in fear-producing situations in both medical and surgical areas as well as psychiatric conditions are indicated.

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Experiences With The Surgical Treatment Of Aneurysms Of The Abdominal Aorta *

J. Herman Mahaffey, M.D.**
Louisville, Ky.

JUST seven years ago Dubost[6], in March 1951, performed the first successful resection of an aneurysm of the abdominal aorta and reestablished continuity of flow by the insertion of an aortic homograft. Prior to Dubost's spectacular achievement a variety of procedures had been utilized, namely, ligation of the aorta proximal or distal to the aneurysm, wiring and electrothermic coagulation, banding of the aorta in conjunction with wiring and electrothermic coagulation, and cellophane wrapping. These approaches, all palliative in nature, met with varying and quite limited success. Indeed, in comparison with the present day method of resection and grafting, the results were very discouraging. Since 1951 the surgical techniques of resection and replacement have been standardized. Resection has now been successfully extended to include aneurysms with involvement of the celiac, superior mesenteric and renal arteries.[5]

Initially the impediment obstructing the advance of surgery of abdominal aortic aneurysms was the lack of a suitable graft for replacement of the resected vessel. This problem was solved with development of methods for the preservation of artery homografts in nutrient media and later with the freeze-dried homograft. Subsequently there developed a tremendous need for artery homografts in the rapidly expanding field of vascular surgery. This together with the legal and physical difficulties encountered in their procurement, technical factors involved in processing of artery homografts, and lack of ready availability in suitable numbers and sizes wherever needed led to the investigation of synthetic substitutes. Furthermore, evidence was accumulating regarding the development of typical atherosclerotic lesions in the human aortic homograft. Although the ideal vascular prosthesis has as yet not been developed, there are several substitutes now in use which have been rather satisfactory.[3, 4, 7, 13] Flexibility, inertness, ability to hold its shape, ease in handling, and permeability are desirable qualities of a vascular prosthesis.[4]

Aneurysms of the abdominal aorta are almost always arteriosclerotic in etiology, and almost always arise below the renal arteries. The aneurysms, fusiform in shape, involve the aortic bifurcation over eighty-five per cent of the time. The onset of symptoms in these patients is a poor prognostic sign and it is generally accepted that one-half of these individuals will die within six months to two years after the onset of symptoms. Estes,[8] however, found that the survival rate for the patients who were asymptomatic at the time of diagnosis was no better than the survival rate of those who had symptoms. In a collected series[2, 8, 9, 10, 14] of patients having an abdominal aortic aneurysm in whom the cause of death was determined (Table I), rupture of the aneurysm was responsible for the patient's death in fifty-eight per cent (116 of 199). Although the development of symptoms referrable to the aneurysm is a definite indication for surgery, the mere presence of an aneurysm alone without symptoms does not constitute an absolute indication for surgery. Recent myocardial infarction, cardiac decompensation, severe arterial insufficiency of the lower extremities, impaired renal function, and incurable malignancy are contraindications to surgery in patients with asymptomatic aneurysms. In the poor risk patient the final decision as to whether to operate should be left to the surgeon.

Table 1
Rupture of Abdominal Aortic Aneurysm as Cause of Death in Patients with Aneurysm in Whom Cause was Determined

Kampmeier, 1936	81.6%	(31 of 38)
Estes, 1950	63.3%	(31 of 48)
Zech, et al, 1954	56.3%	(27 of 48)
Hanson & Denman, 1955	60.0%	(12 of 20)
Crane, 1955	34.1%	(15 of 44)
TOTALS	58.3%	(116 of 199)

* *Read before the combined meeting of the Kentucky Surgical Society and the Virginia Surgical Society at White Sulphur Springs, West Virginia, April 11-12, 1958.*

** *From the Department of Surgery, University of Louisville School of Medicine.*

† *The artery homografts used in these cases were obtained from the University of Louisville Artery Bank, established and supported by grants from the Louisville, Kentucky, and Paducah-McCracken County Heart Associations.*

Non-Ruptured Abdominal Aortic Aneurysms

During the period from September 1955 to March 1958 seven patients with non-ruptured arteriosclerotic abdominal aortic aneurysms were resected electively (Table 2). Five were private patients and two were service cases at the Louisville General Hospital. In this group were five men and two women. The age range was 64 to 71 years except for a 57-year-old man whose aneurysm was incidental and whose symptoms were due to an incomplete occlusion of the left common iliac artery. The primary symptoms were abdominal discomfort and an abdominal mass which in two individuals was noted to be definitely enlarging over a period of two to six months. Four patients had hypertension. Two men had previous myocardial infarctions and another, three in all, had abnormal electrocardiograms. Translumbar abdominal aortography was performed in the first four individuals but not in the last three. More recently aortography has not been done unless involvement of the renal arteries by the aneurysm was suspected.

Briefly, the surgical technique used is described. The aneurysm is resected and continuity of flow is reestablished by the insertion of a bifurcation abdominal aortic homograft or a suitable vascular prosthesis. A long midline incision extending from the xiphoid process down to the symphysis pubis is employed. The small intestine is eviscerated out onto the right side of the abdomen and covered with warm moist packs. The posterior peritoneum overlying the aneurysm is incised to the left of the root of the mesentery of the small intestine as is the ligament of Treitz. The inferior mesenteric artery is divided at its origin. The aorta proximal to the aneurysm is mobilized by blunt dissection and encircled with umbilical tapes, and then distal control of the iliac vessels is obtained. Ten milligrams of heparin solution in saline are injected into the aneurysm, and vascular clamps are applied proximal and then distal to the aneurysm.

The aneurysm is excised from below upwards, dividing the lumbar vessels which subsequently are ligated. Depending on the ease with which they may be approached, occasionally some of the lumbar arteries are ligated and divided prior to occluding the aorta. Continuity of flow is restored by the insertion of a reconstituted freeze-dried aortic homograft or a vascular prosthesis which has been soaked in some of the patient's blood to pre-clot it in order to minimize leakage through the graft.

The proximal anastomosis is carried out with a continuous through-and-through suture, begun posteriorly, of No. 000 intestinal silk. The distal anastomosis is completed in a similar

RESECTION OF NON-RUPTURED ABDOMINAL AORTIC ANEURYSM

History	Blood Pressure	Operative Findings	Technic of Repair	Type Graft or Prosthesis	Complications	Result (last seen)
1. A.H. 64 F W Mass, 2-3 mos, increasing in size.	212/130	7-14-56 		Nylon knit (Sanger)	None	Excellent 8-12-57 (Retinal hemorrhage, Jan. 57, Stroke Mar. 57.)
2. J.F. 71 M W Mass, lower abdominal discomfort, 5-6 mos. Back pain, 2 wks	142/84	10-4-56 		Nylon knit (Sanger)	None	Excellent 3-16-58
3. P.S. 57 M W Claudication, left thigh and leg, 9 mos. Aneurysm incidental	138/80	5-29-57 		Homograft Freeze dried	None	Excellent 2-17-58
4 E.B. 74 M C Mass, 2 yrs	170/125	7-29-57 		Nylon-dacron knit (Sanger)	Incisional hernia.	Excellent 3-22-58

Table 2

RESECTION OF NON-RUPTURED ABDOMINAL AORTIC ANEURYSM
(Continued)

History	Blood Pressure	Operative Findings	Technic of Repair	Type Graft or Prosthesis	Complications	Result (last seen)
5. C.V. 74 M W Mass, 9 mos. Abdominal discomfort, 7 mos.	180/100	8-8-57 		Nylon-dacron knit (Sanger) (Femoral aneurysm also resected.)	None	Excellent 12-16-57
6. A.C. 66 F C Abdominal discomfort, back pain, nausea, vomiting, 7 mos.	160/90	1-17-58 		Crimped woven Nylon, chemically treated (Edwards-Tapp)	Splenectomy at time of aortic surgery Decubitus ulcer.	Excellent 3-5-58
7. M.A. 71 M C Expanding pulsatile mass, 6 mos. Epigastric fulness, 4-6 mos.	136/66	2-7-58 		Dacron knit, flexible (DeBakey)	Postoperative hemorrhage Reoperated 2-8-58, leak at bifurcation of prosthesis	Excellent 3-8-58

fashion using No. 0000 arterial silk. After completion of one iliac anastomosis the opposite iliac portion of the graft is clamped, and circulation is reestablished on the completed side, thus minimizing the occlusion time on that side.

Following satisfactory restoration of flow, the posterior peritoneum and the ligament of Treitz are approximated. In the last few cases because of the ileus commonly associated with the procedure, a gastrostomy has been done utilizing a Foley catheter with a 30 cc bag. This obviates the use of a Levine tube, necessary for four or five days, with its attending discomfort, impairment of the cough reflex, and increased incidence of respiratory complications. The abdominal incision is closed in layers as well as with retention sutures of No. 5 silk which are placed through all layers except the peritoneum.

Discussion

The abdominal aortic bifurcation was involved by the aneurysm in every case. In two individuals the internal iliac artery on one side was divided because of an aneurysm of that vessel distally. In one woman in whom the aneurysm involved not only the aortic bifurcation but both common iliac artery bifurcations as well, both internal iliac arteries were divided, and the distal anastomoses were carried out between the prosthesis and the external iliac arteries. An end-to-end anastomosis was carried out between the iliac limb of the homograft and the external iliac artery in a 57-year-old man who also had partial occlusion of the common iliac artery, preserving the hypogastric artery on that side. A femoral artery aneurysm was also resected in a 74-year-old man at the time the aortic aneurysm was excised (Fig. 1-4).

Reoperation in a 71-year-old man was done twenty-four hours later because of postoperative hemorrhage resulting from a leak in the bifurcation of the prosthesis (no suture line involved). Splenectomy was carried out in a woman when the splenic capsule, involved in dense adhesions, was torn during exploration. The period of total aortic occlusion in this group varied from sixty-eight to one hundred and five minutes with an average of eighty-seven minutes.

Every patient survived elective resection of the aneurysm and is in excellent condition as far as the operation is concerned. All the patients are known to be living and all but one has had a recent follow-up within the last month. One woman with severe hypertension developed retinal hemorrhages six months after surgery and had a stroke eight months later. These seven patients are still living two to seventeen months after surgery, an average of eight and one-half months.

During this same period surgery was thought to be contraindicated in two men with aneurysms of the abdominal aorta. The first was a sixty-seven-year-old male with cramping abdominal pain of two months duration, abdominal fullness for one year, a pulsatile abdominal mass, hypertension, and arterio-

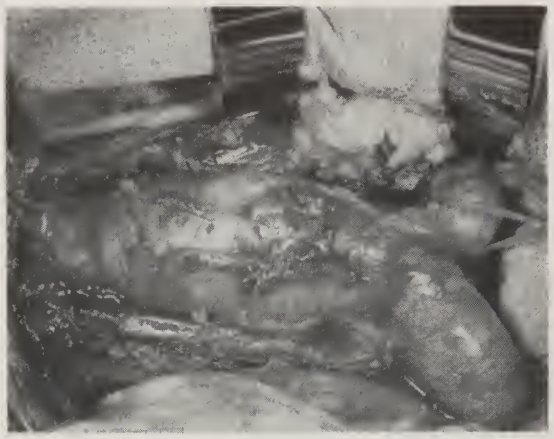


Figure 1
Photograph taken at operation showing a non-ruptured arteriosclerotic aneurysm of the abdominal arta and bifurcation (Case 5).



Figure 3
Photograph taken at operation showing an arteriosclerotic aneurysm of the common femoral artery (Case 5).



Figure 2
Photograph at operation showing a Nylon-Dacron knitted tube replacing the distal aorta and common iliac arteries (Case 5).

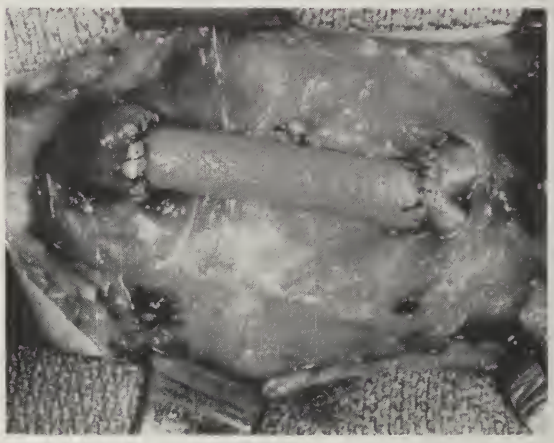


Figure 4
Photograph at operation showing a Nylon-Dacron knitted tube replacing the common femoral artery (Case 5).

sclerotic heart disease with auricular fibrillation. It was felt that he was in borderline cardiac compensation and that his symptoms were primarily cardiac. Accordingly digitalis, diuretics, and a low salt diet were prescribed. Six weeks later he died. Post-mortem examination revealed a recent pulmonary embolus as well as a recent infarct of the right lung.

The other patient was a seventy-one-year-old man admitted to the hospital for pneumonia and in whom an abdominal aortic aneurysm was palpated. In addition to exertional dyspnea and electrocardiographic evidence of an old myocardial infarction and coronary insufficiency, he had had progressive intermittent claudication of the lower extremities for several years. Bilateral percutaneous femoral arteriography revealed occlusion of both superficial femoral and popliteal arteries. He was turned down as a candidate for aortic resection because of his poor general condition and because the aneurysm was asymptomatic. Furthermore, resection of the aortic aneurysm in view of the severe arteriosclerotic occlusive disease of the lower extremities would risk the hazard of gangrene and possible loss of one or both legs.

Ruptured Abdominal Aortic Aneurysms

During the period from September 1955 to March 1958 four patients with ruptured arteriosclerotic abdominal aortic aneurysms were operated upon with one survival (Table 3). Two other individuals died of rupture of their aneurysm without surgery, one because of failure to appreciate the seriousness of his symptoms. The other one, an 81-year-old senile woman with heart disease, in shock and anuric, was not operated upon at the family's request after the prognosis with and without surgery had been discussed with them. The ages of these patients were 59, 70, 70, 81, 81 and 85 years. All were private patients but one. All but one were in shock when first seen and three were anuric. Perforation of the aneurysm

RESECTION OF RUPTURED ABDOMINAL AORTIC ANEURYSM

History	Blood Pressure	Operative Findings	Technic of Repair	Type Graft or Prosthesis	Complications	Result (last seen)
1. D.B. 85 M C Mass, 3 yrs. Back pain, 7 hrs.	90/50	9-9-55 		Orlon knit (Sanger)	None	Excellent 3-20-58 (trans-urethral resection 12-31-57)
2. M.H. 70 W M Mass, 7 yrs. Cellophane wrapping 6 yrs. ago. Abdominal pain, 10 days.	96/74	2-8-56 		Homograft Freeze dried.	Shock; anuria Hemoperitoneum Retroperitoneal hemorrhage.	Died 2-9-56 Autopsy Graft intact
3. S.G. 81 F W Back pain, 2 days Shock, 36 hrs. Anuria, 30 hrs.	76/50	8-2-56 	Aorta clamped proximal to aneurysm 17 min. after incision begun.		Expired during surgery, shortly after aorta clamped.	Died 8-2-56 Autopsy
4. C.W. 59 M W Back pain, 14 hrs. Shock. Anuria.	102/80 Normal 190/120	7-20-57 		Nylon-dacron knit (Sanger)	Tracheostomy, 3rd postop. day. Lower nephron nephrosis. Infarction, left kidney.	Died 7-26-57 Autopsy Graft intact.

Table 3

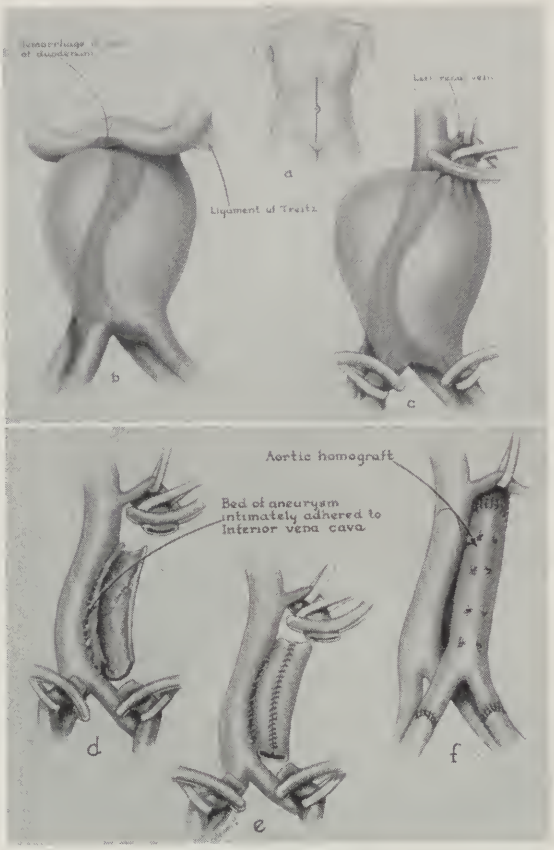
in three was characterized by the onset of relatively sudden severe left lumbar back pain. One of the two whose pain was abdominal had had a cellophane wrapping of his aneurysm previously and his perforation was anterior. One man described the onset of sudden severe cramping in both thighs and legs as a "double Charley-horse" while pushing a power mower. He subsequently developed back pain. The aneurysm had ruptured posteriorly at the aortic bifurcation. In this group the aneurysm involved the aortic bifurcation in every instance.

A brief summary of the patients undergoing surgery for ruptured arteriosclerotic abdominal aortic aneurysms follows.

Case 1. D. B., an 85-year-old Negro man whose case has been previously reported,[11] developed symptoms on September 9, 1955 of rupture of his aneurysm approximately seven hours prior to surgery. The peritoneal cavity contained approximately 150 cc of blood-tinged fluid. The aneurysm extended from just below the renal arteries down to and including the bifurcation of the aorta. A large retroperitoneal hematoma surrounded the abdominal aortic aneurysm. The aneurysm was successfully resected and a knitted Orlon aortic bifurcation prosthesis was inserted. Total blood replacement was 5 liters. In January 1958 he underwent a transuretheral resection for benign prostatic hypertrophy. Now 88 years old, he was last seen on March 20, 1958, two and one-half years following resection of a ruptured aortic aneurysm, and was found to be in excellent condition. He is mentally alert and does a good deal of walking. He does, however, use glasses to read fine print!

Case 2. M. H., a 70-year-old white male, was seen on January 31, 1956, with a history of lower abdominal discomfort which lasted several hours the preceding day. In 1950, at time of cholecystectomy, cellophane wrapping of a 5 centimeter in diameter abdominal aortic ancurysm involving bifurcation was done. For ten to fifteen years he had had osteoarthritis of the lumbar spine with frequent back discomfort. He was admitted to the hospital on February 6, twenty-four hours earlier than had been planned because of rather constant abdominal pain thought to be related to the aneurysm. During the ensuing forty-eight hours he complained frequently of abdominal distress and was quite nauseated.

On February 8, hiccoughing and vomiting occurred, and the hemoglobin was significantly lower than that on admission. He was immediately taken to surgery and a huge arteriosclerotic aneurysm was found to be leaking. It was necessary to leave a portion of the aneurysm which was intimately adherent to



Figures 5 and 6

Diagrams illustrating technique of resection of a ruptured abdominal aneurysm and replacement with an aortic homograft. It was necessary to leave a portion of the aneurysm wall which was intimately adhered to the vena cava.

the vena cava (Fig. 5-6). This remnant was oversewn. An abdominal aortic bifurcation homograft was used to replace the resected segment. He expired 18 hours after surgery, anuric and in continuing shock. Post-mortem examination revealed a hemoperitoneum and extensive retroperitoneal hemorrhage. The graft and the anastomoses were intact. The bleeding was felt to have originated from the retroperitoneal tissues and perhaps from the wall of the aneurysm which was left behind.

Immediate surgical treatment in this man with a symptomatic aneurysm might have altered the unfavorable outcome.

Case 3. S. G., an 81-year-old white female, was seen on August 2, 1956 forty-eight hours after the onset of left lumbar back pain. She had been in shock 36 hours and anuric for 30 hours before the diagnosis of a ruptured aortic aneurysm was entertained. During this period she had received approximately 6 liters of blood. The shape of her abdomen resembled that of a pregnant woman at term. Surgery was undertaken as a desperate measure with the understanding of the family. Seventeen minutes after the incision was begun the aorta was clamped proximal to the aneurysm and she expired shortly after. While the aorta was being mobilized above the aneurysm, bleeding was controlled by pressure on the proximal aorta. As the occluding clamp was being applied, several hundred cc's of blood was lost from the perforation which had been partially freed up.

Earlier diagnosis resulting in operation at an earlier time would have improved this elderly woman's chances for survival. It was felt that in view of her precarious physical state the loss of several hundred cc's of blood while obtaining proximal control of the aorta was enough to cause her death. Thoracotomy for proximal control of the aorta prior to mobilizing the aorta above the aneurysm is of value in some of these patients.

Case 4. C. W., a 59-year-old white male, was seen on July 20, 1957, approximately twelve hours after the onset of severe left lumbar back pain. In December 1956 a bilateral internal mammary artery ligation had been done for angina. Normally he was hypertensive. He was in shock and anuric. Two hours later resection of the ruptured abdominal aorta aneurysm was done and a knitted Nylon-Dacron aortic bifurcation prosthesis was inserted. He was oliguric following surgery and the blood non-protein nitrogen gradually rose.

A tracheostomy was done on the third postoperative day to control his secretions. Three days later he suddenly went into acute pulmonary edema and expired. Post-mortem examination revealed the vascular prosthesis and anastomoses to be intact. In addition to lower nephron nephrosis, there was extensive cortical infarction of the left kidney. Both renal arteries were markedly arteriosclerotic and the lumen of the left near the kidney hilus was pinpoint in size.

Prompt surgical intervention with the avoidance of shock and massive blood replacement might have prevented the renal failure and altered the results in this patient who had marked arteriosclerosis of the renal arteries.

Discussion

Prompt and early surgical intervention, resection of the ruptured aneurysm and restoration of continuity of flow with an aortic homograft or suitable vascular prosthesis can convert a hopeless prognosis into a relatively more

favorable one.[1, 12] The age of the patient, the amount of physical activity until time of rupture of aneurysm, the degree of generalized arteriosclerosis, and the duration of perforation of the aneurysm before resection are important factors influencing the recovery rate.[1] The mortality rate of ruptured aneurysms treated by aortic resection and vessel replacement should be approximately 40 per cent.

Freeze-dried aortic bifurcation homografts were used in two patients and synthetic materials in eight. In one instance a thoracic aortic homograft was sutured to an abdominal aortic homograft to gain diameter to more nearly approximate the large aorta of the patient. One knitted Orlon, two knitted Nylon, three knitted Nylon-Dacron, one Edwards-Tapp, and one flexible Dacron knit bifurcation tubes were the synthetic materials employed. To date there have been no instances of thrombosis or rupture of any of the homografts or vascular prostheses which were used. In the one instance in which a flexible Dacron knit bifurcation tube was utilized, reoperation twenty-four hours later was necessary because of hemorrhage resulting from a leak in the bifurcation of the prosthesis. This may have been due to an end thread which was cut off short just before inserting the graft.

Summary

Seven patients with non-ruptured arteriosclerotic abdominal aortic aneurysms were resected electively without mortality (Table 4) during a two and one-half year period. Only one of four individuals with a ruptured aneurysm survived operation. Freeze-dried aortic homografts were used in two patients and synthetic materials in eight.

The mere presence of an aneurysm alone without symptoms does not constitute an absolute indication for operation in the poor risk patient. The final decision as to whether to operate in this type individual should be left to the surgeon. The development of symptoms referrable to the aneurysm or an increase in the size of the aneurysm is a definite indication for rather immediate surgery.

Table 4
Arteriosclerotic Abdominal Aortic Aneurysms
Sept. 1955 to March 1958

ANEURYSMS RESECTED	No. Cases	No. Deaths	Per Cent
Non-ruptured	7	0	0
Ruptured	4	3	75
ANEURYSMS NOT RESECTED			
	No. Cases	No. Deaths	Per Cent
Non-ruptured	2	1	50
Ruptured	2	2	100

Addendum

Since this paper was presented, two additional patients with arteriosclerotic aneurysms of the abdominal aorta involving the aorta bifurcation have undergone surgery.

The first was a 61-year-old man known to have an aortic aneurysm for eleven months. On April 23, 1958, three days after it had begun to leak, the aneurysm was resected using a crimped woven nylon aortic bifurcation prosthesis (Edwards-Tapp). He expired five days after surgery with oliguria and sudden hypotension. Post-mortem examination revealed arteriosclerotic heart disease with coronary sclerosis, nephrosclerosis, and hemoglobinenic hephrosis (lower nephron hephrosis). The graft and anastomoses were intact and there was no evidence of postoperative bleeding.

The second patient was a 78-year-old man with symptoms of one month's duration definitely attributable to the aortic aneurysm. The history suggested that he may have been aware of the aneurysm for about one year. Successful resection of this non-ruptured abdominal aortic aneurysm was accomplished on August 12, 1958, using a flexible Dacron aortic bifurcation prosthesis to replace the resected aorta. The postoperative course was uneventful and when last seen, ten weeks after surgery, he had continued to do well.

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(Continued on page 1154)

The Staphylococcal Problem Today *

VERNON KNIGHT, M.D.**
Nashville, Tenn.

THE current problem with staphylococcal infections is really two problems: first, that of the occurrence of outbreaks of staphylococcal infection in hospitals, and second, the drug resistance of staphylococci. Clearly, if means were available to prevent the spread of staphylococci in hospitals, outbreaks of infection could be controlled, no matter what the resistance of the organism. Obviously, improvement would also result if we could restore the effectiveness of penicillin and tetracycline therapy in this infection. Since it appears that modern hospitals may be having more instead of fewer cases of staphylococcal infection, it is apparent that more adequate methods of control are needed.

Proper control will depend upon a greater understanding of the mechanisms by which antibiotics influence staphylococci and upon more knowledge of the epidemiology of this organism. New information has accumulated on these points in recent years which makes useful planning possible. I would like to summarize and interpret some of these studies.

Effects of Antibiotics

It is not known what role the use of antibiotics and the consequent appearance of drug-resistant staphylococci plays in the cause of staphylococcal infection. It is not known whether drug-resistant staphylococci are more or less virulent than other staphylococci. Tests in animals have been almost useless in study of this point. Certain observations in this laboratory, however, bear on the question.[1] Contrary to some opinions, the use of antibiotics does not appear to increase the number of carriers of staphylococci. Persons are carriers or non-carriers of staphylococci for long periods of time, and repeated observations of treated patients have never shown to us any tendency for antimicrobial treatment to cause non-carriers to become carriers. The only thing we have seen drugs do to staphylococcal carriers is to suppress the carrier state temporarily, and this occurs whenever an active drug is used in carriers carrying a drug susceptible strain. If this person is in a hospital which is a reservoir of drug-resistant strains, the drug-resistant organisms will implant promptly in the treated carrier. Treatment of non-carriers has no effect whatever with regard to staphylococci.

The points concerning staphylococcal infection and drug resistance are related, since development of strains resistant to drugs limits the opportunity for treatment. Thus it would be desirable first to reduce the frequency of staphylococcal infections by preventing their spread in hospitals and second to diminish the drug resistance of staphylococci so that effectiveness of treatment could be maintained at an optimal level.

Control of Spread

The problem of preventing spread of staphylococci is an imposing one. In our studies of drug-resistant staphylococci, it was seen that under ordinary conditions of residence in a hospital ward a carrier could acquire an entirely new group of staphylococci within hours if he received certain antibiotics.[1] The rapidity of this change suggested the air-borne route of transmission, plus an enormous susceptibility of carriers to rapid colonization with staphylococci through agencies as yet unknown.

While I am in favor of aggressively attempting to control spread of staphylococci by eliminating or keeping off hospital wards all personnel with staphylococcal infections and segregating patients who are heavy carriers, in addition to the introduction of more hygienic practices in hospital care, I am pessimistic about the success of these ventures. Control of drug resistance may have a more favorable prospect, however, if hospitals will require: 1) that less antibiotics be used generally, and only in patients actually needing them; and 2) that the use of certain antibiotics be restricted periodically so that staphylococcal resistance can be avoided, thus preserving their effect for treatment of staphylococcal infections. This last procedure is based on the concept that drug-resistant staphylococci are principally, if not wholly, produced by the use of antibiotics in persons who are carriers of staphylococci. Once they are drug-resistant, they may spread to personnel and others and be disseminated

* *Presented at the Fayette County Medical Society meeting, Lexington, May 13, 1958.*
** *Department of Medicine, Vanderbilt University School of Medicine, Nashville.*

to patients.

Factors Influencing Staphylococcal Infection in Hospitals

I believe that if staphylococcal infections are more common now than formerly, at least three factors play a role in their cause.[2]

First, the frequent use of antimicrobial drugs in hospital patients has certainly prevented or aborted many infections with organisms which used to cause an appreciable incidence of hospital infections such as group A streptococci, type III and other pneumococci, E. coli, and others. In susceptible patients denied infection with these organisms by antimicrobial treatment, drug-resistant staphylococci have undoubtedly often found opportunity to invade.

Second, for several reasons, patient populations in hospitals today are more susceptible to infection of all kinds than they were a decade or so ago. Hospital patients are older and have an increased frequency of degenerative diseases. There is an increased use of rigorous therapies such as nitrogen mustard, roentgen rays and other agents which decrease resistance of patients to infection. Increasingly radical surgical procedures are employed. Finally, patients are more susceptible because of the longer survival with serious diseases through better control of deleterious electrolyte, endocrine, and metabolic causes of illness and death.

Third, it is conceivable though not proved, that staphylococci are more virulent than before, especially those of the drug-resistant phage group III or 80/81 pattern which predominate among the staphylococcal flora of many hospitals in this country.

Whatever the cause, staphylococci account for a significant proportion of deaths from infection in hospitals. The prognosis seems most unfavorable in patients who develop staphylococcal bacteremia while in the hospital and as a complication of other illness. This apparently reflects the impaired host resistance of our hospital patients and possibly the selective influence of the antibiotic-filled atmosphere of the hospital which gives the drug-resistant staphylococcus an advantage.

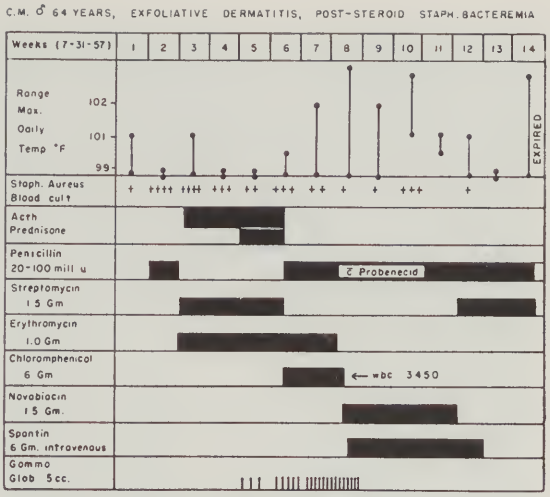


Figure 1. A sixty-four-year-old male with Staphylococcus aureus bacteremia who failed to respond to treatment with multiple antibiotics and gamma globulin. Infection acquired in the hospital as a complication of exfoliative dermatitis. Staphylococci from blood cultures were resistant to penicillin, tetracycline, and streptomycin. They were susceptible to erythromycin, novobiocin, and Spontin (ristocetin).

An example of fatality in this situation may be seen in Figure 1, a 64-year-old male who developed a Staphylococcus aureus bacteremia following steroid treatment of exfoliative dermatitis. Despite treatment with penicillin, streptomycin, tetracycline, chloramphenicol, erythromycin, novobiocin, Spontin (ristocetin), and gamma globulin, death ensued. We have observed a number of cases of this sort with similar outcome recently. Failure of response to agents effective *in vitro* may be a measure of the impaired host resistance to infection.

Summary

The occurrence of severe staphylococcal infections in hositals today, whether of increased incidence over earlier years or not, is evidence of an unsolved problem in medicine. The fact that the infections are often caused by drug-resistant staphylococci is additional evidence of an undesirable man-made phenomenon.

While our principal difficulties undoubtedly stem from the well-known capacity of staphylococci to adapt to unfavorable environmental circumstances, the challenge to modern medicine remains—let us find still newer methods to control this serious problem.

Cryptococcus Meningitis

WILFRID C. GETTELFINGER, M.D.
Louisville, Ky.

ANTIBIOTICS were first used therapeutically following the discovery of penicillin by Sir Alexander Fleming. Formerly fatal diseases, such as subacute bacterial endocarditis and tuberculous meningitis, are being cured by their use. Observing this advance in controlling infectious diseases has been most gratifying. Apparent cure of an almost uniformly fatal illness, Cryptococcus meningitis, using a new antibiotic, Amphotericin B (Fungizone®)* is to be reported.

Characteristics of Cryptococcus

Cryptococcus neoformans (Torula histolytica) is a fungous which can affect almost any organ of the body. It most frequently causes a meningitis or meningoencephalitis. The organism was first isolated in Europe in 1894. In the United States in 1916 meningitis due to Torula histolytica was reported. This organism was identical to that found in cases of meningitis in Europe. The name, Cryptococcus neoformans, has priority under the rules of botanical nomenclature. It appears as small round to oval budding cells averaging about 10 microns in diameter. A prominent gelatinous capsule surrounds the organism which is best demonstrated by an India ink preparation. Growth of the characteristic mucoid or gelatinous colonies is easily obtained on Sabouraud's medium at room temperature in 7 to 20 days.

Diagnosis

Meningitis caused by this organism begins insidiously with fever, malaise and headache of increasing severity. As the disease progresses there is stiffness of the neck and positive Kernig and Brudzinski signs. Finding the organism in the spinal fluid or positive cultures are the only ways to establish a diagnosis. The spinal fluid cell count may range from 100 to 800 cells. The sugar content of the spinal fluid is decreased and the protein increased. There are no serologic or skin tests to aid in diagnosis.

Amphotericin B (Fungizone®) is an antifungal antibiotic derived from a previously undescribed species of Streptomyces. It is supplied in a sterile, lyophilized yellow powder, each vial of which contains 50 milligrams of Amphotericin B activity combined with approximately 41 milligrams of sodium desoxycholate with sodium phosphate as a buffer. It is prepared for use by reconstitution in 5 percent Dextrose Injection, U.S.P. Information concerning dosage, mode of administration and possible toxic manifestations is available from the Squibb Institute for Medical Research.

In St. Joseph Infirmary, a 440-bed general hospital in Louisville, Ky., only five cases of Cryptococcus meningitis have been admitted during the past eight years. All patients with this disease died except the one here reported.

Case Report

The patient, E. P. G. Sr., age 59, is a proprietor of a restaurant. He was first seen at his home November 18, 1957. He complained of fever, malaise, moderate non-productive cough and a rather severe headache. His temperature at home varied from 101 to 103 degrees Fahrenheit. The headache increased in severity and on the seventh day a moderate stiffness of the neck and suggestive Kernig and Brudzinski signs were present.

He was admitted to St. Joseph Infirmary November 25, 1957. A spinal puncture made the following day showed a clear fluid and an initial pressure of 320. The spinal fluid showed a cell count of 92 (65% polys, 35% lymphs), protein of 148, sugar of 16 and chloride of 610. The colloidal gold curve was 1 1 2 2 2 2 1 0 0 0 0. An India ink preparation of the fluid showed budding bodies consistent with the morphology of Cryptococcus neoformans (Fig. 1). A second spinal puncture was done November 29th in order to do a culture; at this time the cell count was 276 (75% polys, 29 lymps). The culture showed a growth of Cryptococcus neoformans in abundance (Fig. 2).

Urinalysis on admission was normal. Red blood cell count was 4,960,000, Hgb. 13.3 gms, white blood cell count 9,600, polys 78, lymphs 16, monos 5, basos 1. Non-protein nitrogen 34. The blood count, urine, non-protein nitrogen and cephalin cholesterol flocculation tests remained normal during the hospital

* *Assistant Professor of Medicine at University of Louisville, Louisville, Ky.*
Head of the Section of Internal Medicine, St. Joseph Infirmary, Louisville, Ky.
* *Amphotericin B (Fungizone®) was kindly supplied by Dr. Gavin Hildick-Smith of the Squibb Institute for Medical Research, New Brunswick, N. J.*

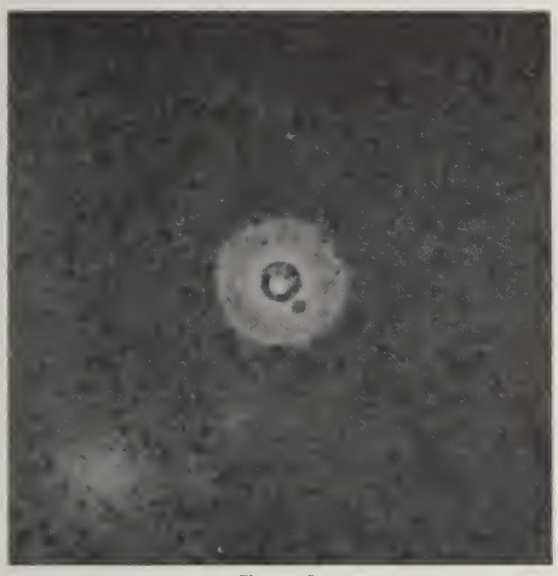


Figure 1
Photomicrograph of Crytococcus neoformans. India ink preparation of spinal fluid.

stay of two months. Chest x-rays November 25, 1957 and January 21, 1958 were negative.

Amphotericin B (Fungizone®) was started November 30; on this day he was given 25 mg. intravenously. The following day he was given a second 25 mg. The daily dosage for the next 12 days was 50 mg. Following this 50 mg. was given every other day for an additional six weeks. The medication was given intravenously each time in 500 cc of 5% dextrose in distilled water over a six-hour period.

There was prompt clinical improvement and within 72 hours the temperature was normal. After one week of treatment all symptoms had subsided. The third spinal fluid examination, December 9th, showed 95 cells (21% polys, 79% lymphs), protein 185 and sugar 22. The India ink preparation was negative; however, a culture still showed a very few colonies of Cryptococcus neoformans. The next spinal fluid examination was done December 16th. Both India ink preparation and cultures were negative. Cell count was 36, protein 144 and sugar 33. The last spinal puncture was December 30, 1957 showing negative cultures and negative India ink preparation. Cell count remained 36 (25% polys, 75% lymphs), protein 104 and sugar 60. The patient was discharged from the hospital apparently cured January 24, 1958.

Mild toxic reactions of nausea and vomiting occurred after the infusion for the first three days; generally after the treatment was finished. There were no further reactions until the sixteenth day at which time the temperature

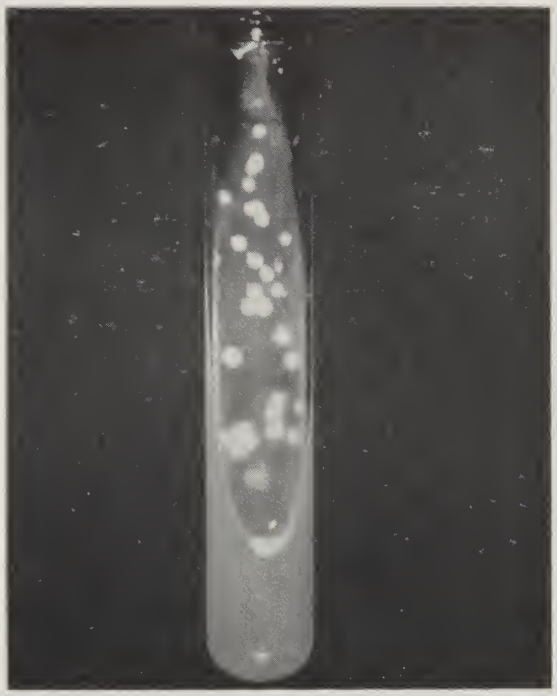


Figure 2
Photograph of colonies of Cryptococcus neoformans. Culture of spinal fluid on Sabouraud's media.

went up to 101.8 degrees Fahrenheit with accompanying chilly sensations. This type of febrile reaction occurred with chilly sensations on four subsequent occasions; each time near the end of treatment and occurring on the 24th, 26th, 28th and 30th day respectively. There were no reactions of any type the last three and one-half weeks of treatment. On one occasion there was some infiltration of the infusion in the subcutaneous tissues. There was induration and redness at the site for a period of 24 hours.

The patient has been seen regularly since leaving the hospital. He was last seen February 28, 1958. At this time he had returned to his work full time. He has complained of being hard of hearing during the past month. His hearing has been checked by Dr. George Uhde. There is a 22.1 per cent nerve deafness in the right ear and a 32.3% in the left ear. It is not known whether this was present before his present illness. It may be a toxic manifestation of the infection or a delayed toxic reaction from medication. There have been no previous reports of eighth cranial nerve impairment from the drug, so that other causes are more probable.

Summary

A case of Cryptococcus Meningitis has apparently been cured with a new antifungal antibiotic, Amphotericin B (Fungizone®).

The Allergic Child*

Harry S. Andrews, M.D.
Louisville, Ky.

THE incidence of major allergic diseases (asthma, pollinosis, chronic or acute urticaria, and recurrent G.I. disturbances associated with one of these) is about 10% of the population. Cohen[1] studied normal children and found that 50% of them eventually developed allergy. London,[2] in 1937, showed that in a general pediatric practice, 6.6% of 1500 children had allergic manifestations. He again studied a group in 1951-52 and found an incidence of 6%.

Increasing Frequency

The frequency of the different types of allergies has been studied on both the East and West coasts by Glaser[3] and Cline.[4] They show:

MAJOR SYNDROMES	GLASER	CLINE
1. Eczemas	45.9%	33%
2. PAR and RURI**	59.1%	59.0%
3. Pollinosis	33%	38%
4. Asthma	53.4%	26%
MINOR SYNDROMES	**GLASER**	**CLINE**
1. Urticaria	16.3%	12%
2. Migraine	1.6%	2.0%
3. Gastro-intestinal	29%	20%
4. Drug reactions	5.25%	—
5. Contact Dermatitis	1.55%	—
6. Conjunctivitis	.9%	—
7. Sensitivity to insect bites	1.16%	—

Glaser estimates that in infants, 80% of those with atopic eczemas and 25% of those with seborrheal dermatitis develop other allergic syndromes later. Ratner[5] found that of all cases of eczema, 50% developed upper respiratory infections or asthma.

Since the bulk of allergic syndromes become established before the sixth year of life it becomes evident that it is important to use prophylactic treatment in the early pediatric age group. In fact, once the allergic diathesis is established, additional allergic syndromes are very likely to follow, especially if eczema has occurred.

It is the impression of people who study these conditions that allergic diseases have been steadily increasing for the past years. Perhaps the increasing spread of ragweed (following civilization and the clearing of forests) plays some part since this sensitivity is easily acquired.

Studies by Grulee[6] and Sanford[6] have shown that seven times more bottle-fed babies develop eczema than do breast fed babies. Since American babies are predominately fed cows milk this may add to the increase.

Characteristics of Allergic Child

Growth—Cohn[7] and Abram[7] studied 150 allergic and 102 non-allergic children by the Wetzel grid and found that during active allergy there was growth failure but with controlled allergy growth was normal. They also found allergy more frequently in the constitutionally slender children, especially the boys. Welsh studied groups for 12 to 100 months and found only 2 of 47 children were not normal in growth.

Intelligence—Balyeat[8] in 1929 studied 80 allergic and 80 non-allergic children and came to the conclusion that allergic children were normal in health and mentality. Piness[9] and co-workers, in 1936, studied 145 children in the Los Angeles allergic clinic and found them to be the same as normal children selected from the city schools. They also found allergic diseases did not seem to hamper the children as much as was expected from other illnesses. Chobot[10] found the same results from mental studies of allergic children.

Food dislikes—Vaughn[11] and associates showed that the food dislikes of allergic children cannot be relied upon as meaning food sensitivity. B. Z. Rappoport and Jerome Glaser feel that if one could obtain a careful history of food likes and dislikes in children under 3-4 years of age, one would find that it did have significance. Vaughn[11] found that when food dislikes were significant the allergic response was gastro-intestinal fairly soon after ingestion and that eggs were the most common offender.

Infection and allergy—Feingold[12] found that an infection in an allergic child followed one of two patterns: 1. Pertussis and viral diseases (including viral contagious diseases) resulted in a temporary clearing of allergic manifestation. These are all leucopenic diseases except pertussis. 2. Infections with polyleucocytosis

**Presented at meeting of 14th KSMA Councillor District at Hazard on June 18, 1958 and General Practitioner's Seminar, Medical Arts Building, Louisville on August 16, 1958.*

***PAR = Perennial allergic Rhinitis.*
RURI = Recurrent Upper Respiratory Infections.

resulted in exacerbation of the allergic manifestations, particularly bronchial asthma. Freis[13] and Boone[13] in 1953 studied this and found that the benefit came with elevation of temperature and persisted from 5 days to 1 year. They felt that the improvement was probably due to mobilization of the endocrine defense mechanism or to the increased histaminolytic activity. However, this is unfortunately not consistently true and cannot be depended upon.

Examination

To find the cause of allergy in children it is very important that all possibilities be explored. Allergies found in children are multiple and involve most of the tissues of the body if they become sensitized. A thorough investigation entails:

1. *History*—The history should include both a pediatric and allergic history. The allergy history is very important. The history should be taken with the parent alone and not with the child in the room. One may either use a check form or take a piece of paper and make notes as the informant relates the facts. In either case a methodical form should be kept in mind so that no clue be left unsolved. First, let the informant (in most instances the mother) tell you all that is on her or his mind about the child's condition. Then pursue all leads found by this talk and any that may come up later. Always remember that this part of the examination is by far the most important and do not hurry through it.

2. *Physical examination*—A complete pediatric physical examination should be done. Particular attention should be paid to that part of the body involved by the allergy. If added laboratory examinations are needed they also should be done. This and the history may be done at the first visit.

3. *Special Tests Pertinent to the Allergy*—These tests usually are intradermal, scratch, passive transfer skin tests or ophthalmic tests. Since most parents think an allergy survey is mainly skin testing and that it is a very exact and scientific procedure, it is best to tell them that this is only another laboratory examination and not nearly as important as the history.

The skin reactions of infants and children are not as numerous or as large as those in the older children and adults. This should be remembered when this examination is done. Unless the positive skin test fits in with the history the test should be scrutinized most thoroughly before considering it as positive evidence. A positive skin test may mean: 1. The presence of clinical sensitivity to the material used. 2. Past sensitivity to the material that may or may not have had clinical significance. 3. Potential sensitivity. That is, the patient is in the process of becoming allergic to the material. 4. Skin sensitivity to the material due to a biogenic relationship to the allergin found in 1, 2, 3.

The age at which a patient can be skin tested is a frequent question. One can do reliable skin tests on infants 8 weeks old. However, it usually is not necessary at this age as a child's symptoms often can be controlled until he is a year old.

Some allergists do scratch tests only and some do intradermal tests only. It is safer and more reliable to do the scratch test first and then do intradermal tests with all materials that were negative or questionable to the scratch. It is safer because there has been no report of death from scratch tests as there has been from intradermal tests. It is also best to do both in sequence because many negative scratch tests have been found to be positive to intradermal testing and were of clinical significance (intradermal tests are 100 times more sensitive than scratch tests). The particular technique should be developed by the operator but should always be consistent in the size and depth of the scratch and the amount of material used.

How many tests should be used? Children have a more limited environment than the adult and therefore not as many tests are needed. They should be tested with the materials indicated in the history plus substances proven by experience as often the cause of the trouble in the child of that age.

Sometimes the skin will not react positively to substances which by history should be causing the trouble. Under these conditions the ophthalmic test may show a positive reaction and should be reserved for this condition.

After having completed a history, a thorough physical examination and exhaustive testing, one should sit down and make a final diagnosis and then outline the therapy. First write out in detail what is the trouble with the child and give detailed instructions to the parents so they may know what they are to do. Relay this information to the referring physician and write out plainly for him what his duties are in the management of the child. We send a therapy

sheet for him to keep an accurate record so that on subsequent visits, when the patient returns with the sheet, proper evaluation can be arrived at and if adequate results are not being obtained, steps can be taken to help correct this. It is best for the patient and the referring physician that the consultant check the progress of the patient every two to four months until there is definite and rapid improvement in the child's condition.

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Manuscript Memos

Manuscripts should be submitted in duplicate to The Journal of KSMA, an original copy and one carbon, and typed with double spacing. Maximum length of an article should not exceed 4500 words, and the Board of Consultants on Scientific Articles prefers that they be briefer than this when possible.

Footnotes and bibliographies should conform to the style of the Quarterly Cumulative Index Medicus published by the American Medical Association. This requires in the order given: name of author, title of article, name of periodical, with volume, page, month—day of month if weekly—and year. The Journal of the KSMA does not assume responsibility for the accuracy of references used with scientific articles.

All scientific material appearing in The Journal is reviewed by the Board of Consultants on Scientific Articles. If illustrations are submitted with a paper, The Journal will assume the cost for the first three one-column width half tones. The cost of additional illustrations will be borne by the essayist.

Arrangements for reprints of an article should be made directly with the publisher of The Journal, Gibbs-Inman Printing Company, 817 W. Market St., Louisville, Ky.

The By-laws of the Kentucky State Medical Association provide that all scientific discussions and papers read before the KSMA Annual Meeting shall be referred to the KSMA Journal for consideration for publication. The by-laws further state that the editor or the associate editor may accept or reject these papers as it appears advisable and return them to the author if not considered suitable for publication.

Please mail your scientific articles to The Journal of the Kentucky State Medical Association, 1169 Eastern Parkway, Louisville, Kentucky.

CASE DISCUSSIONS
From The
University of Louisville Hospitals

A Case of Enteroliths

History

R. S., a thirty-year-old colored married female, developed sudden onset of R.L.Q. pain about three hours prior to admission. The pain was described as cramping in nature recurring at about five minute intervals. She vomited several times with small amounts of greenish material, but had no nausea. She had a normal bowel movement on the morning of admission. The family history was non-contributory. Her past history revealed pulmonary tuberculosis with adequate treatment. A chest film made two weeks prior to present illness was reported negative.

Physical Findings

Her temperature was slightly elevated but pulse and blood pressure were within normal limits. The abdomen was soft and flat. An area of localized tenderness, which was associated with slight muscular guarding, was elicited in the R.L.Q. There was no rebound tenderness or referred pain. No mass was palpable. Peristalsis was active. Pelvic examination was negative. The routine laboratory data were within normal range. The admitting diagnosis was atypical appendicitis, probably retrocecal, or ovarian cyst with torsion.

Because of the atypia of her clinical picture, it was decided to have her under observation. At the end of 24 hours, her cramping abdominal pain and vomiting persisted and the physical findings remained unchanged. An exploratory laparotomy was performed and an old tuberculous peritonitis found. Both the small and large bowel were matted together throughout by old adhesions, some of which were filmy and others quite dense. The appendix and ovaries were identified and were normal. There was no evidence of small bowel obstruction. The abdomen was closed following lysis of numerous adhesions. Two days following operation, x-ray films of the abdomen were obtained because of continued abdominal cramping and moderate distension. The true nature of her illness was finally revealed and confirmed by subsequent radiologic examinations.

Discussion

J. T. Linq, M.D., Department of Radiology: Roentgenograms of the abdomen showed no paralytic or obstructive ileus. Multiple calculi were noted. These were aggregated in the right lower abdomen and appeared to be in the area of the terminal ileum. (Fig. 1). There

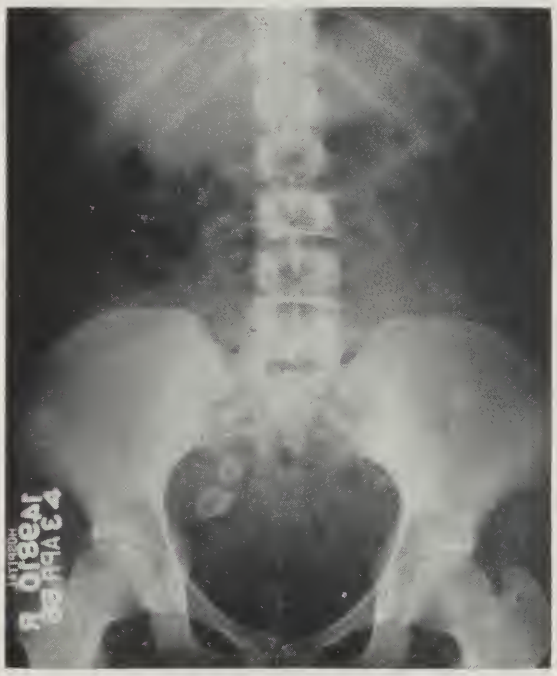


Figure 1

were 9 calculi present presenting an oval-to-round contour, each measuring 0.5-0.2 cm. in diameter. Each calculus had a sharply defined dense margin with a relatively radiolucent center. A barium meal study showed a slight delay in transit through the small intestine with narrowing of the terminal ileum at its insertion into the ileo-cecal valve. At least, two fistulous tracts were demonstrated connecting the terminal ileum with the cecum. (Fig. 2). The intraluminal position of the calculi in the distal ileum was indicated by the appearance of multiple filling defects in the barium column. (Fig.

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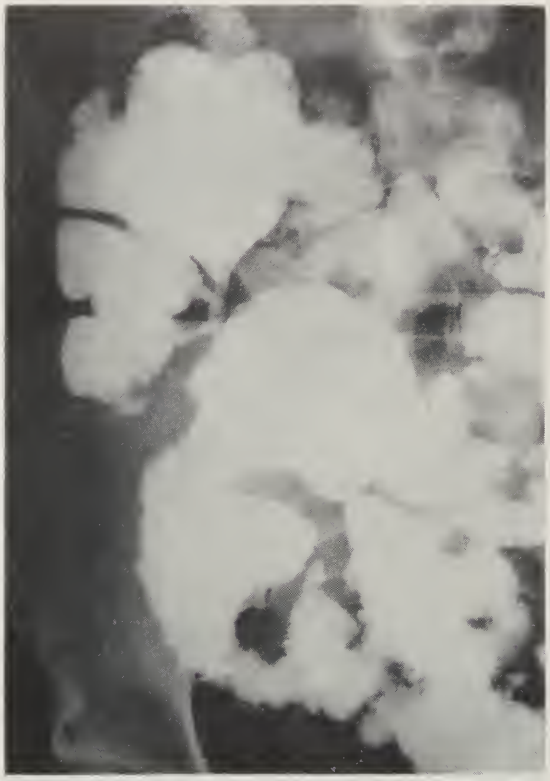


Figure 2

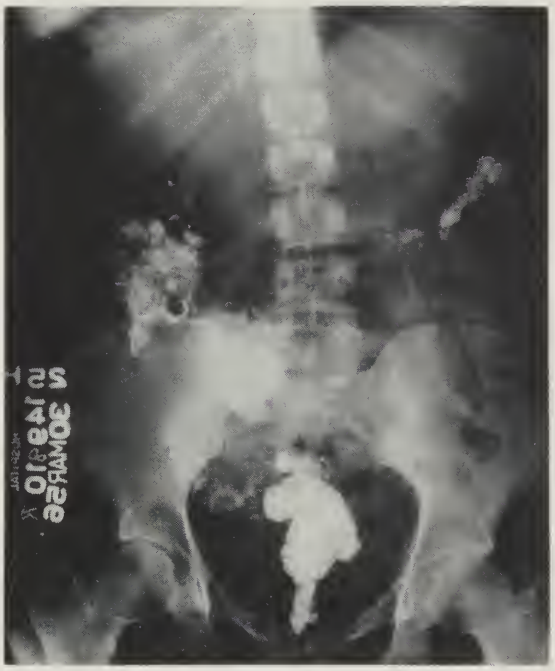


Figure 3

3). The roentgen diagnosis was multiple enteroliths resultant from stricture of terminal ileum with stasis, probably secondary to chronic tuberculosis peritonitis and/or enteritis.

On the 14th hospital day, a second operation was performed. The cecum and about 38 cm. of the distal ileum were resected. Lying



Figure 4

loosely in the distal part of the ileum were 7 dark brown-green stones, the largest measuring 2.2 x 1.5 x 1.3 cm. In addition to the stones there were two oblong seeds which were covered with green material. (Fig. 4). The histopathologic diagnosis was chronic suppurative inflammation, severe fibrosis, foreign body reactions with no evidence of either regional ileitis or tuberculosis, and enterolithiasis.

A stricture or diverticulum of the small intestine is regarded necessary for the formation of enteroliths. A suitable nucleus must also be present. The composition varies between bile acid, calcium oxalate, and phosphate. Organic matter is usually present. Most of the enteriolliths have a nidus of a small plum or fruit stone. Bile acid enteroliths are more apt to be precipitated in the proximal parts of the small bowel, while phosphate enteroliths precipitate in the more alkaline distal segment. Calcium oxalate stones may occur anywhere if mechanical factors are conducive. The chemical composition of the stones in this case was not determined.

Enteroliths are of obvious clinical and roentgenologic importance. Their detection depends upon the amount of calcium present. They must be differentiated from the multiple causes of intra-abdominal calcification. In most instances, the location, size and pattern of the calcium deposition will generally establish the correct diagnosis.

SPECIAL ARTICLES

Blue Shield and Prepayment

J. Ed. McConnell**
Louisville, Ky.

KENTUCKY Blue Shield was organized by the medical profession, primarily as an indemnity plan, for the people . . . to help them budget in advance for unexpected surgical cost. It also provides an allowance for accident x-ray; for anesthesia; an allowance to doctors for in-hospital medical calls on non-surgical cases; and x-ray treatment for malignancies in lieu of surgery.

Group rates are only $1.25 per month for individuals and $2.50 per month for families. These rates have never been changed . . . benefits have been increased five times. Last year, out of the $4,134,244 paid to doctors, only 48.4% was for surgery done in the hospital, and 51.6% was for office or home surgery, O.B. cases, in-hospital medical, x-ray, anesthesia, and radium therapy.

Low Overhead

Overhead operation of Kentucky Blue Shield is only 10.5% . . . one of the lowest in the nation. Only four out of the some eighty Blue Blue Shield plans operate at a lower cost per member than your Kentucky Plan.

Blue Shield now has over 5,000 firms enrolled in Kentucky on a payroll deduction basis. Individuals 65 years of age and under may apply on a direct basis, and the Farm Bureau offers enrollment to their members on a direct basis. There are 28 salaried men doing group enrollment and group service in Kentucky . . . they receive no commissions . . . they do not contact individuals for enrollment. These men, in addition to their enrollment work, are doing a good public relations job for the doctors and hospitals. You would be amazed at the questions asked them every day, and the statements made to them pertaining to doctors and hospitals; such questions as:

Why does a hospital case cost around $25.00 per day?

Why do rooms cost as much as they do?

Will the doctor increase his charge to me because I have Blue Shield?

Don't many doctors just add their regular charge on top of the Blue Shield allowance?

Don't doctors put a lot of people in the hospital just because they have Blue Cross?

Will I be kept in the hospital longer because I have Blue Cross?

Blue Shield is far from perfect, but it is the best plan . . . in the over-all . . . that is available to the people, and the only plan controlled by the medical profession. Blue Shield offers the doctors the mechanism for large scale consumer credit creation.

Recently in Kentucky there have been criticisms leveled at certain people for their support and endorsement of Blue Cross-Blue Shield . . . and statements made that Blue Cross-Blue Shield was given preferential treatment over insurance companies.

Blue Shield's Position

Our position on this is that when the insurance industry will do for the public . . . and guarantee they will continue to do it . . . what Blue Cross-Blue Shield is doing, they should be given the same consideration as Blue Cross-Blue Shield . . . but not until they do.

Statements have also been made that Blue Cross-Blue Shield is not regulated as is the insurance industry. The facts are that both are more closely regulated than the insurance industry. Changes in rates must be approved by the Department of Insurance. All Blue Cross operating expenses have to be approved by the Commissioner, and Blue Cross benefits must also be approved by the State Department of Health.

**Presented before the Fayette County Medical Society at its September meeting.*

***Vice President of Kentucky Blue Cross Hospital Plan.*

The Achievements of Arist

...in Skin Diseases: In a study of 26 patients with severe dermatoses, ARISTOCORT was proved to have potent anti-inflammatory and antipruritic properties, even at a dosage only ⅔ that of prednisone[1]... Striking affinity for skin and tremendous potency in controlling skin disease, including 50 cases of psoriasis, of which over 60% were reported as *markedly improved*[2]...absence of serious side effects specifically noted.[1,2,3]

...in Rheumatoid Arthritis: Impressive therapeutic effect in most cases of a group of 89 patients[4]...6 mg. of ARISTOCORT corresponded in effect to 10 mg. of prednisone daily (in addition, gastric ulcer which developed during prednisone therapy in 2 cases disappeared during ARISTOCORT therapy).[5]

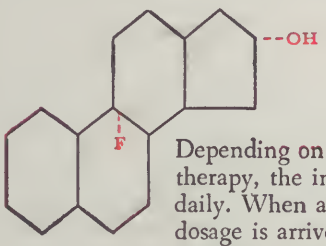
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Triamcinolone LEDERLE

...in Respiratory Allergies: "Good to excellent" results in 29 of 30 patients with chronic intractable bronchial asthma at an average daily dosage of only 7 mg.[6]... Average dosage of 6 mg. daily to control asthma and 2 to 6 mg. to control allergic rhinitis in a group of 42 patients, with an actual reduction of blood pressure in 12 of these.[7]

...in Other Conditions: Two failures, 4 partial remissions and 8 cases with complete disappearance of abnormal chemical findings lead to characterization of ARISTOCORT as possibly the most desirable steroid to date in treatment of the nephrotic syndrome.[8,9]... Prompt decrease in the cyanosis and dyspnea of pulmonary emphysema and fibrosis, with marked improvement in patients refractory to prednisone.[10,11,12]... Favorable response reported for 25 of 28 cases of disseminated lupus erythematosus.[13]



Depending on the acuteness and severity of the disease under therapy, the initial dosage of ARISTOCORT is usually from 8 to 20 mg. daily. When acute manifestations have subsided, maintenance dosage is arrived at gradually, usually by reducing the total daily dosage 2 mg. every 3 days until the smallest dosage has been reached which will suppress symptoms.

Comparative studies of patients changed to ARISTOCORT from prednisone indicate a dosage of ARISTOCORT lower by about ⅓ in rheumatoid arthritis, by ⅓ in allergic rhinitis and bronchial asthma, and by ⅓ to ½ in inflammatory and allergic skin diseases. With ARISTOCORT, no precautions are necessary in regard to dietary restriction of sodium or supplementation with potassium.

ARISTOCORT is available in 2 mg. scored tablets (pink), bottles of 30; and 4 mg. scored tablets (white), bottles of 30 and 100.

Lederle LEDERLE LABORATORIES DIVISION, AMERICAN CYANAMID COMPANY, PEARL RIVER, NEW YORK

Insurance companies' rates are on file, but no approval is required on benefit patterns, and none on expenditures.

Closer regulation of the insurance industry might be in the public interest. Recent activity on the part of some men in the industry has brought this difference in regulations to the attention of some authorities, and there is a possibility of some needed changes being made.

The United States is now the last country in the world of any consequence where the government is not a third party between the patient and the provider of service.

The issue in our country today is, "Who will be the third party?"

Will it be the government? Labor? Commercial insurance? Or will it be the doctors themselves, through their own prepayment plan?

Whether we like it or not, the American economy is built on time payments, and I want to give you some pertinent facts regarding prepayment in the health field . . . important to the public, the medical profession, and the hospitals. The Health Insurance Council reports that at the end of 1957:

121,432,000 persons were protected against hospital expenses.

108,931,000 persons were protected against surgical expenses.

71,813,000 persons had some type protection against medical expenses.

Enrollment

	Hospital	Surgical	Medical
Insurance Companies	70,192,000	67,456,000	33,240,000
Blue Cross-Blue Shield	54,923,000	45,383,000	36,926,000

Insurance companies paid hospitals $1,080,000,000. Blue Cross paid hospitals $1,159,000,000.

On surgical: Insurance companies paid $575,000,000. Blue Shield paid $478,000,000.

In 1957 there was a total of 4.2 billion dollars paid in benefits under health insurance programs. These benefit payments amounted to 11.5 million dollars a day.

Blue Cross with 43.9% of the total people covered paid 51.8% of the benefit.

Blue Shield with 40.2% of the total people covered paid 45.4% of the benefits.

Without this high number of people covered on a voluntary basis, you would have today compulsory government health insurance in America, or socialized medicine . . and if prepayment plans lose the support of the public they now enjoy, the only answer to financing health care will be government medicine through taxation.

Today, one out of every three families is faced with a hospital bill every year, and one out of every 6 people has a case each year, yet as good as times have been, only one out of 10 people have the money saved to pay the bill; therefore, prepayment becomes important —or vital—to the hospitals, to the doctor, to the banker, the merchant, and all the elements of the community. This is particularly true in Kentucky, which has one of the lowest per capita incomes in the nation . . . 68% of the national average . . . about $1,374 per year per person. Twenty-one counties have a per capita income of less than $600 per year per person.

Budget Health Needs

As I said before, our economy is built on time payments; most people pay large expenditures on time. Nationally, 72% of the families in America have no savings, or less than $500. Therefore, it becomes almost vital that a family have in its budget an amount for good health plans.

A logical question, then, is why can't the insurance companies do the job . . . and is it necessary for the medical profession to set up a prepayment mechanism?

This job cannot successfully be done by the more than 1,000 insurance companies in the field because their first concern is profit, which is all right, except when obtained at the expense of human misery and suffering.

Many ethical companies are attempting to write hospital and surgical protection, but also there are many in the field who are horse thieves and high binders.

Should commercial companies take over voluntary prepayment, the economic control of American medicine will pass completely out of the hands of the medical profession.

In the early thirties, Dr. Elmer Hess' committee approached the insurance companies and asked them to do something about insuring hospital and medical care. They refused, saying such risks were uninsurable. Later, as Blue Cross-Blue Shield showed the way, they jumped on the band wagon. This would be all right . . . if they had not confined their efforts to the cream of the risk, and had done a job for all the people. Insurance company rates are based on the experience of each group, whereas Blue Cross-Blue Shield rates are based on the experience of the entire community.

The Forand Bill now in Congress is a direct result of the insurance companies' approach to

prepayment.

We would not have the problem of the aged that we do today if insurance companies had not made a practice of canceling coverage when people leave groups, or reach age 65; or cutting benefits in half at age 65; and some cancel when a chronic or incurable condition develops.

The seeds of destruction for voluntary prepayment are sown in the insurance industry approach, but also prepayment plans face other grave problems . . . not the least of which is the increasing use of service, and the constantly rising cost. These are serious problems and they merit the careful attention of all doctors. These are areas where the doctor . . . and the doctor alone . . . can exercise control.

Some other problems facing Blue Cross-Blue Shield, the doctors and hospitals are the increasing interest in panel medicine and the U.M.W. type of program.

Medicare Problems

Medicare has created some problems. Some people, including doctors, confuse the government program of Medicare with Blue Shield and Blue Cross. I hope all of you understand that the Medicare contract is between the State Medical Association and the Government. Your State Association asked Blue Shield to be the fiscal agent. Blue Shield does not make one dime off of Medicare . . . it's a headache to administer. Blue Shield is handling it strictly as a service to the Medical Association.

Regarding Medicare, a mistake was made, in our opinion, by A.M.A., A.H.A., and Blue Cross-Blue Shield in not fighting to set the program up on an entirely different basis. A better approach would have been to raise the pay of these people and let them buy their own protection; or follow the pattern set in industry and pay part or all of the dues . . . and enroll them in local plans with local rates and benefits. Perhaps it's not too late to change it.

Other problems are:

1. Increased charges to patients because they have protection.
2. Manipulation of diagnosis to help people secure benefits they are not eligible for.
3. Admissions to hospitals for treatment that could be taken care of at home or in the doctor's office.
4. Admission for convenience of doctor or patient.
5. Multiple admissions in same family (baby sitter service).
6. Extended stays in hospital.
7. Excessive use of drugs and medicines.
8. Admissions under assumed names.

Review Committees

One county society in Kentucky has set up review committees to try to eliminate abuse, and the following resolution was passed:

> Anticipate laboratory tests and order them as early as possible after the patient's admission to the hospital.
>
> Answer consultation requests promptly, in all cases within 24 hours.
>
> Inform patients of the date of their expected discharge the day before they are to leave and write their dismissal order early.
>
> Conscientiously attempt to eliminate unnecessary admissions to the hospital, particularly in the case of (a) multiple admissions in one family and (b) hospital employees.

This general resolution was designed to enlist the cooperation of the hospital staff and to orient their thinking toward cutting down on utilization of Blue Cross-Blue Shield. It was the hope of the committee that periodic re-evaluation of the local situation would show definite and increasing improvement. It was acknowledged that some more specific and drastic measures might be necessary if progress is not forthcoming.

9. Fraudulent claims. A refund of $20,000 has been made to Blue Shield, and cancellation of an additional $7,000 in unpaid claims has been secured from one doctor . . . another is under investigation for filing claims for the maximum allowance for surgery for hemorrhoids . . . who it appears is using some heat treatment, or as one doctor said, "cooking them."
10. Almost 100 claims per day are received on people who do not have Blue Shield, or claims for conditions not covered in the contract.
11. Admissions for diagnostic benefits, which are not covered under the contract.

All of these problems happen time and time again, are serious and must be solved.

Recently there was a letter in the New England Journal of Medicine from a Dr. Charles H. Bradford, a Boston physician, expressing his views on Blue Shield. The content of Dr. Bradford's letter is of such importance and

interest and he has such an insight into the problem that its essential points merit careful consideration by doctors everywhere. Dr. Bradford said the development of Blue Shield by doctors represents "one of the few constructive forward steps taken by the medical profession in the last 20 years."

Fundamental Questions

In his letter, Dr. Bradford poses three questions fundamental to what he describes as a long range view of the importance of Blue Shield to the medical profession and its implications to the current socio-economic factors involved in medical practice. These questions are:

What position does the medical profession as a whole occupy in the changing social, economic and political patterns of today?

What part does Blue Shield play in these patterns?

How effective is this part likely to be in the future?

In discussing the first of these questions, Dr. Bradford suggests that the present position of the profession is precarious. "On one side," he writes, "we find ourselves threatened by state and federal programs operating on a large scale and eagerly seeking still further enlargement; on the other side, we contemplate the ugly possibility of domination by pressure groups such as labor unions, or dictation from commercial interests . . . to mention only two of many contenders. In front of us, we face the inescapable and insurmountable wall of rising costs, in which the doctor's fee plays an insignificant part as compared to the staggering cost of hospitalization. Behind us, we hear the hue and cry of increasing hostile public opinion, unleashed and led on by demagogues who clamor for the priceless gift of life and health at bargain rates and the taxpayers expense. As we fare forth into this dark and uncertain forest of "social progress" we can expect about as much security as Little Red Riding Hood enjoyed when she went to visit Grandma."

Dr. Bradford points out that in the face of these conditions, Blue Shield may well "represent one of medicine's few hopes of survival as a self-determining profession." In support of this view, he emphasizes that Blue Shield has provided the profession with "an intelligently co-ordinated and professionally controlled corporate body" through which the profession and public may deal effectively in their common interest and to their mutual benefit.

Dr. Bradford continues by suggesting that if the profession continues to administer Blue Shield wisely, it may be all that doctors need to maintain their professional independence.

What does Dr. Bradford conceive as the elements of a wise administration of its own Blue Shield Plans?

Wisely Administered

"To administer it wisely," Dr. Bradford writes, "we must be willing to give as well as to receive . . . to regulate our practice and our fees so as to preserve our freedom from being regulated and to grant the public as many benefits as we hope to assure for ourselves."

Dr. Bradford expresses the view that the future effectiveness of Blue Shield will depend to a considerable extent on proper and effective management. "A capable management," he writes, "will continue to increase the service of Blue Shield." And in Dr. Bradford's view, the source of management strength in Blue Shield necessarily is derived from the profession itself, for, as he sees it, "We, as doctors and as members of the medical society, are the managers of Blue Shield. Its success depends on us. Its failures remain our responsibility."

We, of the staff of Blue Cross-Blue Shield in Kentucky, in addition to trying to put adequate protection in reach of all the public at a cost they can afford, and trying to help preserve the free choice of doctors and hospitals, are also fighting for a way of life.

If medicine in this country is socialized, it will be the death knell of what is left of our free enterprise system.

And—it's a lot later than too many people realize!

EDITORIALS

Not All Our Fault

IN this issue of the Journal will be found a very informative discussion presented before the Fayette County Medical Society by Mr. J. Ed McConnell, Vice President of Kentucky Blue Cross Hospital Plan. He clearly sketches many of the daily problems with which we all are concerned and indicates some ways in which they can be met.

Mr. Ray E. Brown, superintendent, University of Chicago Clinics, recently wrote in "Hospitals" some interesting observations in "Forces Affecting the Community's Hospital Bill." He stated that medical items not covered by prepayment, such as prescription sales, have sharply increased in recent years, indicating that the public is generally more interested in health care and that increased use of medical, surgical and hospital services is not necessarily an evidence that people are making an effort to get more than they are entitled to from prepayment plans.

In the wholesome advancements in medical and surgical treatment of disease, physicians are able to offer helpful therapy in many diseases which a few years ago were considered hopeless and for which no remedy was known. Much of such therapy is difficult and of long duration. Rehabilitation has taken a firm hold upon the imagination of physicians and patients alike. Physical therapy departments, so rare in hospitals ten years ago, are essential parts of any large hospital facilities now and the modes of therapy there available often restore a disabled person to comparative health and usefulness. But they extend the hospital days.

Advances in the treatment of tubercular and mentally ill patients tends to shift these to the general hospital. Consequently, the cost of care charges from the government, or State or Community to the patients own prepayment plan. Shorter hospitalization and better rehabilitation of the patient often are achieved but a new burden is added to the insurance carrier, whether commercial or Blue Cross-Blue Shield.

It is pointed out that specialists are the largest users of hospital facilities. The rate of increase in specialists can therefore serve as a sort of index to the rate of increase in the utilization of hospital facilities.

These are factors not very frequently discussed. Physicians and hospital administrators need not be belabored for such influences beyond their control, but, as pointed out by Mr. McConnell in his excellent address, there remain plenty of facets which we can and should improve.

Sam A. Overstreet, M.D.

The Gastroscopic Appearance of Linitis Plastica

WE recently examined with the gastroscope three (3) patients who at subsequent operation were found to have linitis plastica; there was noted a very similar appearance of the mucosa in every instance. Each presented a superficial, hemorrhagic gastritis, showed considerable alternation or loss of the normal mucosal folds, and exhibited a lack of distensibility of the stomach with air. There were variations in degree of these characteristics and other changes of the mucosal pattern, as color, moisture, presence of mucus and evidence of peristaltic activity; but the above three findings were strikingly similar.

The pathological process in this lesion begins in and grows along the mucosa and submucosal layers, eventually involving most or all of the stomach wall. Penetration progesses thru the muscularis even to the serosa, and may eventually extend to and involve adjacent structures. The production of collagenous fibres exceeds the rate of growth of actual tumor cells until they may be found sparsely scattered in a dense wall of connective or fibrous tissue, thus producing a very thick and rigid gastric wall. This thickness may be as great as an inch and

so dense as to be clearly demonstrated in the x-ray film, as was true especially in one of our cases.

With thickening and rigidity of the stomach wall peristaltic activity becomes appreciably impaired and there is a progressive marrowing in the gastric lumen and decrease in its capacity. Obstruction and hemorrhage are not rare complications. Anemia may result from malnutrition or from actual blood loss. Perforation rarely occurs.

The disease is relatively rare. The characteristic gastroscopic picture here sketched may be helpful in establishing a diagnosis, which often is in doubt until surgical exploration has been done.

Sam A. Overstreet, M.D.

The Allentown Experiment

YOU doubtless saw an article in the August 4, 1958 issue of *Medical Economics* ENTITLED "Why Blue Cross is in Trouble." I am sure that your thoughts immediately were of the proper analysis of the practices of the present hospitals which you use and also a self-analysis in regard to the part which you can play in the correction of this serious situation.

The Pennsylvania State Insurance Commissioner recently stated tha one solution to the problem of overuse is the method devised by the Medical Staff of Sacred Heart Hospital, Allentown, Pennsylvania. This solution is briefed for you here.

THE PROBLEM: During the first quarter of 1956, patients were being given reservations six weeks in advance of admission because of the "Backlog" of patients. Even then patients often could not be admitted at time of reservations because of intervening emergency admissions and the ever increasing abuse of health insurance contracts by patients already occupying hospital beds. In fact, there was no room for an emergency on at least one occasion during that period.

THE SOLUTION: So grave was the situation that doctors agreed something had to be done. This is the way the medical staff balanced its patient-bed budget to the satisfaction of the hospital, doctors and patients:

The problem of admissions "backlog" was presented at an Executive Medical Staff meeting. Among the causes discussed were slowness in discharging patients, largely because of prepaid insurance; treating patients as inpatients who might readily be treated as outpatients, and delays in ordering ancillary facilities.

A Medical Staff Committee on Admission Conduct and Discharge was formed to work out and execute disciplinary procedures. The entire medical staff was advised on the function and action of the Committee.

Emergency cases were divided into Critical, Serious, and Urgent patients, according to diagnosis and received their respective priority. Each morning for two months the Committee review admissions made during the past day. If the attending physician's classification seemed too high, patients and charts were briefly examined and offending physicians were requested to appear for explanation.

To shorten the patient stay, the following regulations were made:

1. Transfer of patient from one doctor to a specialist must be made before admission.
2. X-ray and lab tests must be ordered before noon of the day of admission to allow for orderly scheduling.
3. Consultation requests should be answered immediately.
4. Doctors should authorize discharge on the day before the patient is to leave.
5. Patients may transfer only to private rooms, not from private rooms to semi-private or ward, since the shortage is in the latter facilities.

A concentrated effort was made to discharge patients who no longer needed hospital care.

THE RESULTS: Within two months, the anti-abuse system was running so smoothly that the daily admissions review was no longer necessary. The medical staff now is "patient-day conscious" and has formed the habit of complying with the regulations. Admissions clerks are educated to patient priority and consult the Committee only on unusual cases.

Today, a three-day reservation is the maximum time needed for a patient to enter the hospital; and emergency cases are taken at all times. An average of 40 more patients are admitted each month. *And no new beds have been added!*

Robert S. Dyer, M.D.

ORGANIZATION SECTION

Rural Health Conference Planned in Louisville, Dec. 4

Panel discussions on geriatrics and transmission of disease from animals to man, a talk on poison control, and an address by a nationally known speaker will highlight the one-day program of the Sixth Annual Rural Health Conference at the Kentucky Hotel in Louisville on Thursday, December 4.

Announcement of the program was made jointly by Mitchell B. Denham, M.D., Maysville, chairman of the KSMA Committee on Rural Health, and Wyatt Norvell, M.D., New Castle, chairman of the Rural Health Council, who urged KSMA members to attend.

A special feature of the conference will be an address by Leonard Read, Ph. D., of the Foundation for Economic Education, Inc., Irving-on-the-Hudson, N. Y., at the luncheon session. Title of his address will be "The Essence of Americanism."

Outstanding senior citizens will participate in a panel entitled "Remaining Useful in Advanced and Retirement Age." Subjects discussed will be: "Why Are We Concerned with Advanced Age?," "The Problem with Which You Confront Us," "Things that Society Needs that We Can Provide," and "The Physical and Emotional Needs of the Aged." Taking part in the discussion will be: Dr. Herman L. Donovan, J. E. Stanford, Miss Myrtle Weldon, Earl Mayhew, and Robertson Joplin, M.D.

Charles A. Walton, Ph. D., of the University of Kentucky College of Pharmacy will discuss "Poison Control" as part of the morning session.

The third section of the meeting will feature a panel on "How Diseases are Transmitted from Animals to Man." Participants in this panel had not been announced at press time, but it was expected that they would be authorities in the field.

92 Counties Cooperating in Drive to Detect Diabetes

Ninety-two Kentucky counties are cooperating with the KSMA in the eighth annual Diabetes Detection and Education Drive on November 16-22, according to Robert J. Hoffman, M.D., South Fort Mitchell, Chairman of the Associate Committee on Diabetes.

Poster publicizing the drive, which is sponsored by the KSMA in cooperation with the American Diabetes Association have been mailed to physicians, hospitals, and pharmacies throughout the state.

The Committee requests that all physicians cooperate by displaying the posters in a conspicuous place in their offices and by urging their patients to take advantage of the free urine sugar tests they are offering during Diabetes Week.

Last year physicians gave 52,500 free tests which lead to the discovery of 137 new diabetics. In urging greater physician participation this year, Doctor Hoffman stressed the opportunity this annual drive gives physicians to render service to the public.

"Recent Advances in Therapy" Subject of U of L PG Course

A postgraduate course on "Recent Advances in Therapy" will be presented by the Department of Medicine, University of Louisville School of Medicine, at Louisville General Hospital, on December 19-20, according to Beverly T. Towery, M.D., Louisville, professor and chairman of the Department of Medicine, U of L.

Following is the program of the Seminar which will be held in the Rankin Amphitheater. All KSMA members are cordially invited to attend, Doctor Towery said.

Friday, December 19

8:45	Registration
9:00	"Advances in the Management of Infectious Diseases," Arthur C. White, M.D., instructor in medicine, U of L
10:00	"The Management of Congestive Failure with Newer Diuretics," Leonard Leight, M.D., assistant professor of medicine, U of L
10:30	Intermission
10:45	"Drug-induced Gastrointestinal Disorders," Malcolm M. Stanley, M.D., professor of experimental medicine, U of L
11:15	Presentation of selected patients
12:30	Luncheon
2:00	"The Management of Chronic Respiratory Insufficiency and CO_2 Retention," John B. Hickam, M.D., chairman, department of medicine, Indiana University Medical Center.
3:00	Presentation of Selected Patients
4:00	"What Can We Do About Arteriosclerosis?," Maurice M. Best, M.D., Associate Professor of Medicine, U of L

Saturday, December 20

9:00	"The Treatment of Myxedema, Hypothyroidism, and Hypometabolism," Beverly T. Towery, M.D., chairman, Department of Medicine, U of L
10:00	Intermission
10:15	Presentation of Selected Patients
11:15	"The Status of Treatment of Chronic Drug Intoxication," Harris Isbell, M.D., director of research, USPHS Hospital, Lexington, Ky.
12:15	Question Period

Credit acceptable to the American Academy of General Practice for its members will be announced at a later date.

Dr. Irvin Abell, Jr., of Louisville Chosen KSMA President-Elect

Irvin Abell Jr., M.D., a Louisville surgeon, was chosen president-elect of the Kentucky State Medical Association by unanimous vote of the House of Delegates at its final session on Wednesday night, September 24.



Dr. Abell

Doctor Abell is past president of the Jefferson County Medical Society and will be chairman of the Society's Board of Governors next year. He is former president of the St. Joseph Infirmary medical staff and is a director of the Kentucky Division, American Cancer Society.

A graduate of Yale and of the University of Louisville School of Medicine in 1935, Doctor Abell has been chairman of the Nazareth College Board of Overseers and is on the president's civic council of Bellarmine College. His father, the late Irvin Abell, Sr., was president of the KSMA in 1927.

Elected vice presidents at the meeting were: Marvin Lucas, M.D., Louisville, (Central); Thomas O. Meredith, M.D., Harrodsburg, (Eastern); and Lillard F. Beasley, M.D., Franklin, (Western).

Woodford B. Troutman, M.D., Louisville, was re-elected secretary, and Delmas M. Clardy, M.D., Hopkinsville, was elected treasurer. Robert C. Long, M.D., who had been serving as Delegate to the AMA to fill the unexpired term of the late Clark Bailey, M.D., was elected to his first full term as AMA Delegate and George Archer, M.D., Prestonsburg, was re-elected alternate delegate.

Postgraduate Seminar Planned Dec. 18 at Norton Infirmary

A one-day postgraduate seminar will be presented by the trustees of the John N. Norton Memorial Infirmary in Louisville in conjunction with the Kentucky Chapter of the American Academy of General Practice at the Infirmary on Thursday, December 18.

The morning session, which will begin at 10 a.m., will consist of 12 ten-minute papers on "Hypertension." Following a hospital luncheon, the afternoon session will be devoted to 12 miscellaneous subjects emphasizing diagnosis and treatment from the standpoint of the practicing physician.

The entire program has been accepted by the KAGP for four hours of Category 1 credit. There will be no tuition fee for the seminar, the hospital's contribution to Kentuckiana as a community service. The entire collection of papers presented will be prepared in book form and distributed to those attending.

Preceding the opening of the scientific session the Auxiliary of the hospital will serve coffee and cakes to participants and their wives. Physicians planning to attend are urged to write the Postgraduate Medical Seminar, Norton Memorial Infirmary, Louisville, for a reservation.



Winner of the Outstanding General Practitioner Award Brent Weddle, M.D., Somerset, and recipient of the Distinguished Service Medal Joseph E. Johnson, M.D., South Williamson, posed with the first winner of the R. Haynes Barr Award for an outstanding layman in the field of public health, James Blackerby, Louisville.

Awards Presentations Made to Three at President's Luncheon

Two Kentucky physicians and an outstanding layman were honored by the Association at the President's Luncheon in the Ballroom of the Brown Hotel on Wednesday, September 24. Recipients of awards were: Brent Weddle, M.D., Somerset, Outstanding General Practitioner Award; Joseph E. Johnson, M.D., South Williamson, Distinguished Service Award; and James F. Blackerby, Louisville, the R. Haynes Barr Award.

Doctor Weddle, a member of a family of physicians, has been president of the Pulaski County Medical Society on four different occasions. He was honored by the KSMA for his many contributions to the health, care, education, and welfare of his community and county. He started his practice in 1908 after graduation from the University of Louisville School of Medicine, and has been elected Commissioner and director of a local bank in Somerset.

Doctor Johnson was honored for his efforts to enact health legislation in the public interest. Since 1949 he has been State Senator from the 31st District, playing an important part in the passing of the Medical Practice and Licensure Act and the Insurance Compensation Act. He was instrumental in introducing the Free Choice of Physician Bill at the 1958 session of the legislature. The bill passed the Senate 28 to 9, but failed to be passed by the House of Representatives.

Mr. Blackerby, or "Mr. Jim" as he is affectionately known, is the recipient of the R. Haynes Barr Award given for the first time this year. The award to an outstanding layman in the field of public health, was established by the House of Delegates on the recommendation of past president Richard R. Slucher, M.D., Buechel, in honor of the late R. Haynes Barr,

president of the KSMA in 1952-53, who is known as the "Father of KSMA's public service efforts." It will be given annually at the discretion of the Awards Committee which has the sole responsibility for selecting the recipient.

After 37 years of continuous service, Mr. Blackerby retired on July 1 as director of the Bureau of Vital Records and Statistics of the State Department of Health. For 30 years he was a member of the American Public Health Association and for 22 years a representative of the State Board of Health for legislative matters. He was one of the first state registrars to advocate reduction in the number of registration districts and local registrars in the various states.

Awards presentations were made by KSMA Secretary Woodford B. Troutman, M.D., Louisville.

Drs. Sweeney and Morse Elected to Lead KSMA Council

Garnett J. Sweeney, M.D., Liberty, who is serving his second term as Councilor from the 12th District, was unanimously elected chairman of the KSMA Council at its reorganization meeting on Thursday, September 25.



Dr. Sweeney

Doctor Sweeney, who was elected vice chairman at last year's meeting, is a graduate of the University of Kentucky and the University of Louisville School of Medicine in 1939. He has practiced in Liberty since 1940.

A former president of the Kentucky Chapter, American Academy of General Practice, Doctor Sweeney succeeds Walter L. O'Nan, M.D., Henderson, as chairman of the Council. Doctor O'Nan was re-elected Councilor from the 2nd District by the House of Delegates.

Carlisle Morse, M.D., Louisville, was elected vice chairman of the Council. Doctor Morse is also Governor for Kentucky of the American Diabetes Association and chairman of the Jefferson County Medical Society Legislative Committee.

The Council also formed the new executive committee of the Council for the coming year. The bylaws provide that the Chairman, Vice Chairman, KSMA President, President-Elect, and Secretary are automatically on the Executive Committee. J. Vernon Pace, M.D., Paducah, Councilor for the first District, and Norman Adair, M.D., Covington, Councilor for the Eighth District, were also elected to the executive committee in compliance with the bylaws.

Re-elected to their second full terms on the Council besides Doctor O'Nan were: J. M. Stevenson, M.D., Brooksville, 9th District and Charles B. Johnson, M.D., Russell, 13th District. Elected to their first three year terms were: Wyatt Norvell, M.D., New Castle, 7th District, and Richard G. Elliott, M.D., Lexington, 10th District. Doctor Norvell succeeds Branham Baughman, M.D., Frankfort, and Doctor Elliott succeeds J. Farra Van Meter, M.D., Lexington.



Three KSMA leaders (left to right) Irvin Abell, Jr., M.D., Louisville, president-elect; Robert W. Robertson, M.D., Paducah, president; and Edward B. Mersch, M.D., Covington, immediate past president, posed following elevation of Dr. Abell to office of President-Elect.

Over 300 at President's Luncheon to Hear Clarence Manion

One of the largest crowds to attend the KSMA President's Luncheon—330 physicians and guests—turned out to hear Clarence Manion, noted speaker on Americanism, at the 1958 luncheon in the Crystal Ballroom of the Brown Hotel in Louisville on September 24.

Largest crowd on record was at the 1954 President's Luncheon when 390 turned out to hear the creator of the Rex Morgan Comic Strip, Nicholas P. Dallas, M.D., Toledo.

President Edward B. Mersch, M.D., Covington, presided at the luncheon which honored distinguished guests and three winners of annual KSMA awards (see story of award winners on page 1128).

"The Disease Called Despotism" was the title of Mr. Manion's talk in which he said, "Political health is symbolized by political liberty. It is impossible to speak of a healthy society that is not also a free society."

Saying that one out of every 3 persons on earth is a slave (living under despotism), Mr. Manion drew an analogy between trying to cure Communism with Socialism with trying to cure cancer with cholera.

He quoted George Washington as saying, "Government is like fire—a dangerous servant—a fearful master. Both are indispensable," he said, "but their usefulness depends upon control."

"Despotism," he said, "is like a killing disease—it destroys human liberty—and, therefore, human life."

Nominating Committee Chosen

Members of the KSMA nominating committee for 1959, elected by the House of Delegates, have been announced by Speaker of the House Clyde C. Sparks, M.D., Ashland.

Those elected to serve from a list of ten voted on at the final session of the House of Delegates on September 24 are: James W. Archer, M.D., Paintsville; J. B. Marshall, M.D., Louisville; Joe M. Bush, M.D., Mt. Sterling; Wendell V. Lyon, M.D., Ashland; and Gaithel L. Simpson, M.D., Greenville.


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JEFFERSON CO. MEDICAL SOCIETY
MEDICAL SOCIETY BULLETIN BOARD
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←*See opposite page*

1. In his first official act, new KSMA president Robert W. Robertson, M.D., Paducah, presents the past President's Key to Edward B. Mersch, M.D., Covington, president for 1957-58.

2. Two Calloway Countians—Hugh Houston, M.D., Murray, past president and former Speaker of the House of Delegates, and Edna Coffey, of the Headquarters staff, get together at the registration desk during the Annual Meeting.

3. Demonstrated here is the high degree of attention which guest speaker Clarence Manion, South Bend, Indiana, received at the President's Luncheon when describing the "Disease Called Despotism."

4. Making a point with his well-known eloquence, Clarence Manion, former Dean of the Notre Dame Law School and noted speaker on Americanism, addresses physicians and guests at the President's Luncheon.

5. Distinguished Service Medal Winner, Joseph Johnson, M.D., South Williamson, talks with Bob Clark of the Courier-Journal following the President's Luncheon.

6. KSMA Secretary Woodford B. Troutman, M.D., Louisville, presents the first R. Haynes Barr Award to James Blackerby, Louisville, at the President's Luncheon.

7. Reference Committee Number Four, chaired by Robert Dyer, M.D., Louisville, (seated behind table) debated the third party issue.

8. Newly chosen President-Elect Irvin Abell, Jr., M.D., is congratulated by Speaker of the House Clyde Sparks, M.D., Ashland.

9. "The Pause that Refreshes"—the "coke" booth in the Exhibit Hall enjoyed its customary popularity.

10. The efficiently staffed Jefferson County Medical Society booth was a spot which served all KSMA members with many helpful services.

Dr. Bernhart of Milwaukee, Speaker at Fifth District Meeting

Ervin L. Bernhart, M.D., Milwaukee, Wisconsin, will be featured at the annual meeting of the Fifth Councilor District of the KSMA at the Medical Arts Building in Louisville on November 17, according to an announcement from Carlisle Morse, M.D., District Councilor.

Doctor Bernhart is presently president of the Conference of Presidents and Other Officers of State Medical Association, a Delegate to the American Medical Association and a Councilor of the Wisconsin State Medical Society. He is a former president of the Wisconsin Academy of General Practice and the Midwest Medical Association.

President of the Jefferson County Medical Society, which comprises KSMA's Fifth Councilor District, is Marvin Lucas, M.D., Louisville, who was elected a KSMA vice president at the Annual Meeting in September. Dr. Morse and Dr. Lucas invited all KSMA members to hear Dr. Bernhart.

Arthritis Unit Picks Neustadt

David H. Neustadt, M.D., was named president of the recently reactivated Kentucky Chapter of the Arthritis and Rheumatism Foundation at a meeting in Louisville in September. The foundation supports research into the causes and treatment of arthritis and provides services to those afflicted. A graduate of the University of Louisville School of Medicine in 1950, Doctor Neustadt received specialized training in internal medicine and arthritic and rheumatic diseases in New York City.

AMA to Hold Clinical Sessions in Minneapolis, Dec. 2-5

More than 3,000 physicians are expected to attend the American Medical Association's 12th clinical meeting, designed to help the family physician solve his daily practice problems, in Minneapolis, December 2-5.

General Chairman of the meeting, the first clinical session of the AMA to be held in Minneapolis, is O. L. Norman Nelson, M.D., Minneapolis, president of the Hennepin County Medical Society. N. L. Gault, Jr., M.D., Minneapolis, is the scientific program chairman. The AMA held Annual Meetings in Minneapolis in 1913 and 1928 and in St. Paul in 1882 and 1901.

The scientific portion of the meeting will feature lectures, symposiums, panels, motion pictures, closed circuit color television, and technical and scientific exhibits. A trans-Atlantic conference between AMA members in Minneapolis and British Medical Association members in Southhampton, England, will be on the December 5 scientific program. Scientific programs will be held in the Minneapolis Auditorium, while the House of Delegates, AMA's policy-making body, will meet at the Leamington Hotel, headquarters for the meeting.

The General Practitioner of the Year will be named at the opening session of the House. Other highlights of the meeting will be a jazz concert, concert by the Apollo Club, and a banquet for members of the House of Delegates.

Representing the KSMA in the AMA House of Delegates will be Vinson Pierce, M.D., Covington, and Robert C. Long, M.D., Louisville.

Dues, 3rd Party Med., Constitution Discussed by KSMA House*

Raising the annual KSMA dues, considering third party medicine, and authorizing the redrafting of the KSMA committee structure were among the more important actions taken by the House of Delegates at the 1958 Annual Meeting on the Roof Garden of the Brown Hotel on September 24.

In addition to a number of resolutions there were 36 reports from officers, councilors, committees, and agencies of the Association introduced at the first session of the House on Monday, September 22. These were referred to the seven reference committees who reported at the September 24 meeting.

The recommendations of the KSMA Legislative Committee, the Committee on Postgraduate Education, the Committee on Public Information and Services, and Physicians Placement for an expanded program were accepted. In order to implement these proposals, the House voted to increase the annual KSMA dues by $15.

A proposal made by retiring KSMA President Edward B. Mersch, M.D., Covington, and the Committee to Study the Constitution and Bylaws which

**A complete digest of proceedings will be carried in the December issue of the Journal.*

called for a study leading to revamping of the Association's Committee structure was accepted.

Other recommendations made by Doctor Mersch and approved by the House of Delegates were that the Washington dinner for Senators and Congressmen be continued, the nurses shortage be studied, and that members take more of an interest in legislative matters relating to health and medical care of the people, both on state and national levels.

The House authorized the president to appoint an Advisory Committee to Kentucky Physicians Mutual —The Blue Shield Plan for Kentucky. The recommendation came from the Board of Directors of the Plan and requested that the committee assist Blue Shield in its efforts to offer broader coverage at a fee the people can pay.

The field of third party medicine was given careful scrutiny when a resolution by the Ohio County delegation was eventually referred to the new KSMA Committee on Third Party Medicine for further study. The resolution called on the Committee to Study the Constitution and Bylaws to amend the bylaws making any person who engages in such practice ineligible for membership in the KSMA.

At the 1957 Annual Session, two resolutions were introduced by the Jefferson County delegation seeking to amend the Constitution. These resolutions provided for alternate delegates to the AMA being made members of the KSMA House of Delegates and proposed that the Constitution be amended to allow more than one councilor from any one district.

The proposal to make the alternate Delegates to the AMA members of the KSMA House of Delegates received the majority vote. However, the amendment making it possible to increase the number of councilors did not receive the necessary 2/3 majority. As provided for in the Constitution, resolutions to amend it must lay over for one year before receiving final action.

Another resolution offered by the Jefferson County delegation sought KSMA endorsement of the substitution of the American Academy of General Practice for the Canadian Medical Association on the Joint Commission for Accreditation of Hospitals. The Canadian group is withdrawing from the Commission on January 1. This resolution passed.

The recommendation of the KSMA Insurance Committee, which was supported by the Jefferson County Medical Society and had the approval of the AMA's Council on Medical Service and the Health Insurance Council, was not accepted. However, the Reference Committee suggestion that the short form currently being used by the Cincinnati Academy of Medicine and the Campbell-Kenton Medical Society be amended in four places was passed.

A proposal from the Council of the KSMA calling for the deletion of sections 6 and 7 of Chapter 12 of the bylaws for a period of one year was rejected by the House. Acting at the urgent request of representatives from eastern Kentucky counties, the Council proposed that these sections, which deal with the right of a doctor to appeal to the Council be restudied.



KSMA President Edward B. Mersch, M.D., Covington, recognizes distinguished guests at the KSMA President's Luncheon on September 24.

New Research Building Planned As Part of Medical Center

Plans for a new, seven-story medical research building, as part of Louisville's Medical Center, were announced recently. The building will be built from a grant from the Federal Government amounting to $1,228,510 to be matched equally by the University of Louisville.

Total cost of the building is expected to be about $2,600,000. Construction on the new addition to the Medical Center is expected to start within six months. It will probably be located on Madison Street, between Floyd and Preston, but the exact site is not known, since the property has not been acquired.

The new building, which is expected to double the present space of the medical school, will be used strictly for research—with one-half used for research in basic sciences and one half for clinical research.

In the future, a new U of L Medical and Dental School building will probably be attached to the research building. No money is yet on the horizon for the new Medical and Dental school—which will cost an estimated $5 million to $6 million.

Governor's Medallion Presented to Dr. C. C. Howard

C. C. Howard, M.D., Glasgow, was awarded the Governor's Medallion at a meeting of the Cabinet in Frankfort on October 14. Governor A. B. Chandler made the presentation.

Doctor Howard is the sixth recipient of the award which was created by Governor Chandler in 1957. He is the only physician to be so honored. Doctor Howard was lauded for his leadership in the Kentucky Rural Medical Scholarship Program of the KSMA. He is also chairman of the State Tuberculosis Hospital Commission and a member of the State Committee for Public Health.

His many accomplishments were set forth in a letter and executive order accompanying the bronze medallion. Included in the letter, besides reference

to the Rural Medical Scholarship Fund, was a notation of the struggles of the early days, and mention of the Howard Clinic founded by Doctor Howard in 1946 and "is known today as the model for medical service which offers the best buffer to socialized medicine."

Specialty Groups Add to Success of 1958 Annual Meeting

"The contributions of the 13 specialty groups to the overall excellence of the 1958 Scientific Session can't be overestimated," said Edward B. Mersch, M.D., Covington, chairman of the Committee on Scientific Assembly and Arrangements.

Doctor Mersch particularly cited the groups for providing guest speakers of such a high calibre. Most of the groups had guest speakers who participated in both the specialty group meetings on Wednesday afternoon, September 24, and also took part in the scientific sessions.

Specialty groups participating in the meeting included: Kentucky Society of Anesthesiologists; Kentucky Eye, Ear, Nose and Throat Society; Kentucky Chapter, American College of Chest Physicians; Kentucky Chapter, American Academy of General Practice; Kentucky Obstetrical and Gynecologic Society; Kentucky Orthopedic Society; Kentucky Chapter, American Academy of Pediatrics; Kentucky Chapter, American College of Physicians; Kentucky Society of Pathologists; Kentucky Psychiatric Association; Kentucky Public Health Physicians; Kentucky Radiological Society; and Kentucky Chapter, American College of Surgeons.

Article by Dr. Harvey in "Parade"

An article by Daryl P. Harvey, M.D., Glasgow, entitled, "What You Should Know About Cuts," appeared in a recent edition of "Parade"—a newspaper magazine supplement with a circulation of 8 million in 62 papers in the U.S. Doctor Harvey wrote the article at the request of the American Academy of General Practice as part of a series of messages from family doctors on everyday problems of health.



New KSMA President Robert W. Robertson, M.D., Paducah, was sworn in by Walter L. O'Nan, M.D., Henderson, chairman of the 1957-58 Council at the September 24 meeting of the House.

Kentuckians Become Fellows of ACS at Meeting in Chicago

Fifteen Kentucky physicians were accepted recently as fellows of the American College of Surgeons at a meeting of the ACS in Chicago.

New fellows include: L. Douglas Atherton, Thomas E. Booth, Walter I. Hume, Jr., and Bernard J. Schoo, all of Louisville; James A. Harris, William H. Hyden, Samuel W. Lykins, Andrew M. Moore, and Harold Redd, Jr., all of Lexington; Walter R. Johnson, Jr., Paducah; Paul H. Klingenberg, Covington; Joseph H. Krakauer, Middlesboro; Joseph E. Stephenson, Ashland; Hugh C. Williams, Carrollton; and Herman A. Ziel, Jr., Hazard.

At the ACS meeting in Chicago one of three merit awards for a medical movie was awarded to Hugh B. Lynn, M.D., Louisville. R. Arnold Griswold, M.D., Louisville, finished a one-year term as second vice president of the college.

Ky. Ob.-Gyn. Group Elects Officers

E. G. Heiselman, M.D., Fort Thomas, was elected president of the Kentucky Obstetrical and Gynecological Society at the group's annual meeting held in Louisville in conjunction with the KSMA Annual Meeting in September. Douglas Haynes, M.D., Louisville, was elected secretary and treasurer of the Society.

COMPARATIVE REGISTRATION FIGURES
KSMA Annual Meetings

	1950	1951*	1952	1953	1954	1955	1956	1957	1958
KSMA MEMBERS REGISTERED	713	846	693	786	924	938	923	1094	971
Guest Physicians	126	138	67	75	150	122	157	178	166
Interns-Residents	85	101	73	100	148	106	105	142	108
Medical Students	155	330	252	292	284	299	305	328	269
Registered Nurses	29	27	16	31	25	55	15	28	22
Exhibitors	135	204	180	153	174	174	218	176	211
Guests	64	189	80	72	166	121	108	151	164
Technicians— Office Assistants	86	76	49	54	67	50	54	54	45
TOTAL NON-MEMBERS REGISTERED	680	1065	717	777	1014	927	962	1057	985
TOTAL ATTENDANCE	1393	1911	1401	1563	1938	1865	1885	2151	1956

*KSMA Centennial

Committees Appointed by Council to Serve in 1958-59

Thirteen Council appointed committees have been announced by Chairman of the Council Garnett Sweeney, M.D., Liberty. The committees will serve for the Association year 1958-59.

Physicians serving on the Council's newly appointed committees are as follows:

COMMITTEE ON MEDICAL EDUCATION AND ECONOMICS
Gaithel L. Simpson, Greenville, Chairman
Delou P. Hall, Louisville
O. Leon Higdon, Paducah
Robert E. Reichert, Covington
Claude C. Waldrop, Williamstown

***Associate Committee on Insurance**
Robert E. Reichert, Covington, Chairman
J. Auldin Bishop, Jeffersontown
Arthur L. Cooper, Somerset
John Dickinson, Glasgow
Ernest C. Strode, Lexington

***Associate Advisory Committee to the University of Louisville School of Medicine**
Delou P. Hall, Louisville, Chairman
John G. Archer, Prestonsburg
Mitchell B. Denham, Maysville
C. C. Howard, Glasgow
John S. Quertermous, Murray

***Associate Committee for Contribution to the American Medical Education Foundation**
Claude C. Waldrop, Williamstown, Chairman
James W. Fuller, Mayfield
Paul B. Hall, Paintsville
A. Clayton McCarty, Louisville
J. Farra Van Meter, Lexington

***Associate Committee on Federal Medical Services**
O. Leon Higdon, Paducah, Chairman
Daniel L. Bower, Williamsburg
Morris M. Garrett, Covington
Coleman C. Johnston, Lexington
Robert C. Long, Louisville
Carroll L. Witten, Louisville

MEDICO-LEGAL ADMINISTRATOR
John D. Gordinier, Louisville

ADVISORY COMMITTEE TO THE EDITOR
Richard J. Rust, Newport, Chairman
James E. Hix, Owensboro
Francis K. Massie, Lexington

COMMITTEE ON PUBLIC INFORMATION AND SERVICE
N. L. Bosworth, Lexington, Chairman
K. L. Barnes, Princeton
Carl Cooper, Jr., Bedford
Donald K. Dudderar, Newport
Robert S. Dyer, Louisville

COMMITTEE ON PHYSICIANS PLACEMENT SERVICE
Delmas M. Clardy, Hopkinsville, Chairman
Walter S. Coe, Louisville
Russell H. Davis, Pikeville
J. Thomas Giannini, Louisville
Daryl P. Harvey, Glasgow
Paul E. Holbrook, Ashland

COMMITTEE ON LEGISLATION
Thomas P. Leonard, Frankfort, Chairman for State Affairs
Foster D. Coleman, Louisville, Chairman for National Affairs
George P. Archer, Prestonsburg
Norman Adair, Covington
Branham B. Baughman, Frankfort
Thomson R. Bryant, Jr., Lexington
Willard Buttermore, Corbin
William H. Cartmell, Maysville
Delmas M. Clardy, Hopkinsville
Carl H. Fortune, Lexington
J. Duffy Hancock, Louisville
O. Leon Higdon, Paducah
C. C. Howard, Glasgow
Billy K. Keller, Louisville
G. David McClure, Louisville
J. A. Quertermous, Murray
Richard J. Rust, Newport
Clyde C. Sparks, Ashland
Charles B. Stacy, Pineville
Hays Threlkel, Owensboro
L. O. Toomey, Bowling Green

***Associate Committee to Study Medical Examiner System**
Malcolm L. Barnes, Louisville, Chairman
John D. Allen, Jr., Louisville
Etta W. Best, Lexington
Benton B. Holt, Ashland
William W. Shepherd, Campbellsville
Edward L. Smith, Covington

COMMITTEE ON THIRD PARTY MEDICINE
Edward B. Mersch, Covington, Chairman
Richard R. Slucher, Louisville
Clyde C. Sparks, Ashland
J. Duffy Hancock, Louisville
Garnett J. Sweeney, Liberty

ADVISORY COMMITTEE TO THE UNIVERSITY OF KENTUCKY MEDICAL CENTER

	Dist.	Term Expires
O. Leon Higdon, M.D., Paducah, Chairman	1	1960
Harry C. Denham, M.D., Maysville, Vice Chairman	9	1959
Charles B. Wathen, M.D., Owensboro	2	1959
Delmas M. Clardy, M.D., Hopkinsville	3	1960
Sam A. Overstreet, M.D., Louisville	5	1960
Jesse T. Funk, M.D., Bowling Green	6	1959
Branham B. Baughman, M.D., Frankfort	7	1960
Carl W. Kumpe, M.D., Fort Mitchell	8	1961
Coleman C. Johnston, M.D., Lexington	10	1961
Joe M. Bush, M.D., Mount Sterling	11	1959
Wendell V. Lyon, M.D., Ashland	13	1961
Louise Caudill, M.D., Morehead	13	1961
Paul B. Hall, M.D., Paintsville	14	1959
Charles B. Stacy, M.D., Pineville	15	1961
Charles D. Cawood, M.D., Middlesboro	15	1960
Harold McPheeters, M.D., Louisville		1961
Russell E. Teague, M.D., Louisville		1961
C. C. Howard, M.D., Glasgow		1961

**Associate Committees do not report directly to the House of Delegates.*



when psychic symptoms distort the picture

Dartal helps the patient reintegrate his mental processes

In everyday office practice as well as under hospital conditions Dartal is consistent in its effects as few tranquilizers are.

Dartal promotes emotional balance

Dartal effectively decreases or relieves emotional hyperactivity and psychomotor excitement.

Dartal is unusually safe

At a recent symposium, leading hepatologists* concluded that Dartal is not icterogenic or hepatotoxic.

Dartal is effective at low dosage

One 2-mg. tablet q.i.d. or one 5-mg. tablet t.i.d. in neuroses; one 10-mg. tablet t.i.d. in psychoses.

a superior psychochemical
for the management of both major and minor emotional disturbances

Dartal®

dihydrochloride — brand of thiopropazate dihydrochloride

SEARLE

*A Symposium on the Pharmacologic Effects of Dartal on the Liver, Chicago, Searle Research Laboratories, Feb. 7, 1958.



Newly inaugurated president for 1958-59 Robert W. Robertson, M.D., Paducah, prepares to present the past president's key to Edward B. Mersch, M.D., Covington.

Officers of Woman's Auxiliary Elected at Sept. Meet

Mrs. Jesse T. Funk, Bowling Green, was installed as president of the Woman's Auxiliary to the Kentucky State Medical Association on September 24 during the Auxiliary's Annual Meeting.

Installation of new officers was conducted by Mrs. E. Arthur Underwood, Vancouver, Washington, president of the American Medical Association Woman's Auxiliary.

Other officers who will serve in 1958-59 include: Mrs. Charles B. Johnson, Russell, president-elect; Mrs. Hugh Mahaffey, Richmond, first vice president; Mrs. C. I. Haeberle, Russell, second vice president; Mrs. Guy Morford, Owensboro, third vice president; Mrs. Keith Smith, Corbin, fourth vice president; Mrs. Merle M. Mahr, Madisonville, recording secretary; and Mrs. Carlisle Morse, Louisville, treasurer.

Dr. Overstreet to Head Hosp. Staff

Sam A. Overstreet, M.D., Louisville, Editor of the Journal of the KSMA, was recently elected president of the staff of the Methodist Evangelical Hospital now under construction in Louisville.

Others elected to the staff of the hospital were: Henry Saam, M.D., vice president; M. M. Elliott, M.D., secretary-treasurer; J. B. Lukins, M.D., chairman of the department of surgery; Woodford B. Troutman, M.D., chairman of the department of medicine; J. D. Gordinier, M.D., chairman of the department of obstetrics and gynecology; and Eugene Kremer, Jr., M.D., chairman of the department of general practice. It is anticipated that the hospital will be completed in 1960.

KSMA President Names New P.G. Committee on Med. Education

Robert W. Robertson, M.D., Paducah, KSMA president, has announced the newly appointed Committee on Postgraduate Education as re-organized by the Council of the KSMA at its July 31, 1958 meeting. The new Committee is now awaiting the expanded program of postgraduate medical education.

The reorganization of the Committee was voted when the Council accepted a recommendation from the Postgraduate Committee. The proposal asked that the size of the Committee be increased to include members of the major specialties and representatives of the two medical schools.

The proposal also included a report that terms of the members be staggered in order to provide continuity of action. The committee, which is listed below, will be chaired by Walter Coe, M.D., Louisville.

	Term
Harry S. Andrews, M.D., Louisville	1 year
Charles G. Bryant, M.D., Louisville	2 years
Walter S. Coe, M.D., Louisville	3 years
Frank M. Duncan, M.D., Monticello	1 year
Daryl P. Harvey, M.D., Glasgow	2 years
J. B. Marshall, M.D., Louisville	3 years
Francis M. Massie, M.D., Lexington	1 year
Sam A. Overstreet, M.D., Louisville	2 years
J. M. Kinsman, M.D., U. of L., Louisville	Indefinite
W. R. Willard, M.D., U. of K., Lexington	Indefinite

Dist. 5 TB Hospital Plans Meet in London, November 20

KSMA members from the 15th Councilor District and surrounding counties have been invited to attend the annual TB Seminar at the Fifth District TB Hospital in London on November 20, by T. H. Biggs, M.D., Hospital Director.

Five Kentucky physicians will be participating in the program, which will start at 3:00 p. m. and include a social hour and dinner at 6:00 p. m.

Following is the program:

3:00 p. m.	"Practical Aspects of Pulmonary Functions Testing," William Anderson, M.D., Harlan
3:30 p. m.	"Disorders in Menstruation," Harold Baker, M.D., Assistant Professor of Obstetrics and Gynecology, University of Louisville School of Medicine
4:00 p. m.	"Infectious Diseases and Antibiotic Choice," Milton Miller, M.D., Instructor in Medicine, U of L
4:30 p. m.	"Recent Advances in the Development of Steroids," Robert L. McClendon, M.D., chief, Section on Rheumatic Discases, U of L
5:00 p. m.	Social Hour
6:00 p. m.	Dinner
7:00 p. m.	"Recent Developments in Diagnosis and Treatment of Pulmonary Tuberculosis," Grover Sanders, M.D., Instructor in Medicine, U of L School of Medicine

Dr. J. V. Pace Elected to Head Ky. Blue Shield Board

J. Vernon Pace, M.D., Paducah, was elected president of Kentucky Physicians Mutual, Inc.—Kentucky's Blue Shield Plan, at a meeting of the Board of Directors on October 23.

Also newly elected were: William J. Cartmell, M.D., Maysville, first vice president, and John Dickinson, M.D., Glasgow, second vice president.

The following officers were re-elected: J. P. Sanford, Louisville, secretary; Branham B. Baughman, M.D., Frankfort, treasurer; R. A. Dean, Sr., Louisville, assistant treasurer; D. Lane Tynes, Louisville, executive director; and Stanley T. Simmons, M.D., Louisville, medical consultant.

Howard Frisbie, M.D., Stanford, was elected to his first term on the Board and will fill out the term of the late Clark Bailey, M.D., Harlan.

Re-elected members of the Board of Directors were: B. B. Baughman, M.D., Frankfort; A. L. Cooper, M.D., Somerset; J. B. Lukins, M.D., Louisville; William K. Massie, M.D., Lexington; W. Vinson Pierce, M.D., Covington; R. W. Robertson, M.D., Paducah; Charles B. Stacey, M.D., Pineville; and Russell Teague, M.D., Louisville.

Sixth District Plans Meeting in Bowling Green

A. B. Loveman, M.D., Louisville, will give a Kodachrome slide presentation on "Some Mucous Membrane Lesions of General Interest" at a meeting of the Sixth Councilor District at the Helm Hotel in Bowling Green on Tuesday, November 11, according to John P. Glenn, M.D., Russellville, District Councilor.

Arrangements for the meeting, which will include election of officers, were made by Harold Keen, M.D., Bowling Green, District Secretary.

Lillard F. Beasley, M.D., is District President. The meeting will include a social hour and dinner and is scheduled to begin at 6:30 p.m.

First Issue of "AMA News" Published in Sept.

The first issue of the "AMA News," bi-weekly newspaper of the American Medical Association devoted primarily to medico-economies and socio-economic fields, was published on September 22.

The "News" will concentrate on articles not now carried in other AMA Journals. It will strive to keep physicians informed on legislation affecting the practice of medicine, trends in business and investments, news and court decisions, and to report the who, what, when, how, and why in the world of medicine.

Established by the AMA Board of Trustees because of the increasing need for wider dissemination of information among physicians, the "News" has a mailing list of 225,000 physicians and people in allied fields. The "News" replaces the "AMA Secretary's Letter" which is no longer being published.

If you are a member of the KSMA and are not on the mailing list of the "News," you should contact the KSMA Headquarters Office, 1169 Eastern Parkway, Louisville 17, Ky.

STUDENT AMA

"To Hold My Teacher in this Art . . "

"To hold my teacher in this art equal to my own parents; to make him partner in my livelihood; when he is in need of money to share mine with him; to consider his family as my own brothers, and to teach them this art, if they want to learn it, without fee or indenture; to impart precept, oral instruction, and all other instruction to my own sons, to the sons of my teacher, and to indentured pupils who have taken the physician's oath, but to nobody else."

I'm sure it must seem presumptuous for a medical student to quote the Hippocratic Oath to a group of doctors, but this portion of the Oath has been brought forcefully to the minds of us at U. of L. by a recent report submitted to the public by a group of highly respected Louisville physicians. The main point of the report (contrary to newspaper publicity which tends to make a political issue of it) is the need of the University of Louisville School of Medicine for increased support from the public in general and from the medical profession in particular. The type of support called for in the report is primarily the responsibility of the people of Louisville and the physicians in the immediate vicinity, but it brings to mind an obligation of every physician in the state and particularly those who are alumni of the University of Louisville.

The portion of the Oath quoted above puts this obligation squarely on the line. It states that it is the *duty* of every physician to insure the continuance of instruction of the art and science of medicine. It leaves no option, but recognizes the fact that our debt to our predecessors is best repaid by a solicitous concern for the well-being of our medical progeny.

"Loan funds available to medical students are severely limited. This is one of the acute needs of our school." This is a quotation from the University of Louisville's Handbook for the Entering Medical Student. It seems rather pitiful that such a statement should ever be made by a school possessing the tradition of service and excellence that the University of Louisville has always maintaned. Many physicians have individually given of their time and money to promote the welfare of the school and its students and were it not for these dedicated men most of us (this writer included) would have never been able to enter medical school.

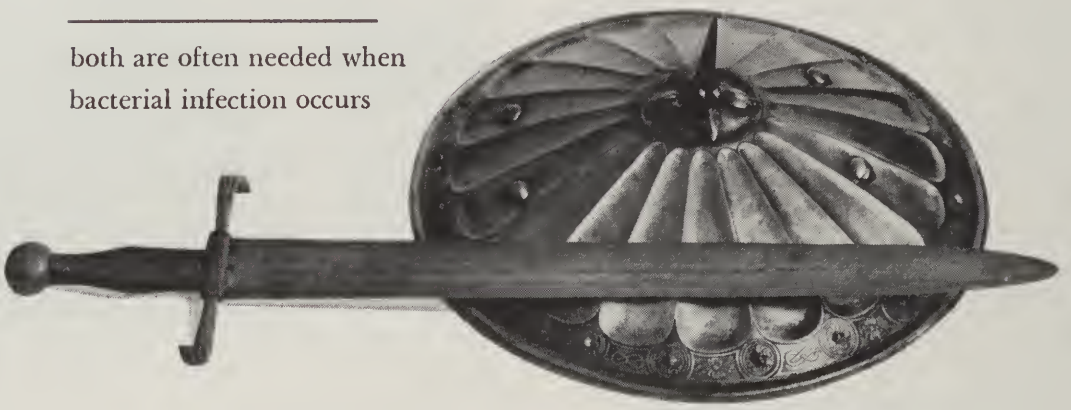
But the hard fact remains that only a small percentage of the total of those obligated to the school and its students have responded to their sworn commitments. In schools of comparable age, especially those located in the East, endowment funds and alumni support are such that the *majority* of students receive some part of their training cost on the basis of scholarships and interest-free loans. These schools are not dependent upon the whims of politicians for their very existence, but in the great American tradition are prepared to move forward on the basis of their own resources.

This is not to be construed as a plea for funds

▪ prompt, aggressive
antibiotic action
▪ a reliable defense against
monilial complications

---

both are often needed when
bacterial infection occurs



for a direct strike at infection
Mysteclin-V contains tetracycline phosphate complex

It provides a direct strike at all tetracycline-susceptible organisms (most pathogenic bacteria, certain rickettsias, certain large viruses, and Endamoeba histolytica).

It provides the new chemical form of the world's most widely prescribed broad spectrum antibiotic.

It provides unsurpassed initial blood levels — higher and faster than older forms of tetracycline — for the most rapid transport of the antibiotic to the site of infection.

for protection against monilial complications
Mysteclin-V contains Mycostatin

It provides the antifungal antibiotic, first tested and clinically confirmed by Squibb, with specific action against Candida (Monilia) albicans.

It acts to prevent the monilial overgrowth which frequently occurs whenever tetracycline or any other broad spectrum antibiotic is used.

It protects your patient against antibiotic-induced intestinal moniliasis and its complications, including vaginal and anogenital moniliasis, even potentially fatal systemic moniliasis.

MYSTECLIN-V

Squibb Tetracycline Phosphate Complex (Sumycin) and Nystatin (Mycostatin)

Capsules *(250 mg./250,000 u.), bottles of 16 and 100.* Half-strength Capsules *(125 mg./125,000 u.), bottles of 16 and 100.* Suspension *(125 mg./125,000 u. per 5 cc.) 60 cc. bottles.* Pediatric Drops *(100 mg./100,000 u. per cc.). 10 cc. dropper bottles.*

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for the University of Louisville, but it is an urgent request from your lineal medical descendants for the ever-increasing support and encouragement of the school of your choice according to your capabilities.

W. Neville Caudill
President, U. of L. Chapter, SAMA

U of L Med. School Faculty Changes Announced by Trustees

At a recent meeting of the Board of Trustees of the University of Louisville a number of medical school faculty changes were announced.

Medical School appointments included: Milton F. Miller, M.D., instructor in medicine; Jerry M. Shaw, M.D., instructor in medicine; Joseph H. Geyer, M.D., associate professor of medicine; Patrick W. Cummings, M.D., instructor in pathology; Orville S. Clark, M.D., instructor in anesthesiology; and Carroll Robie, M.D., instructor in medicine.

Promotions included: Condict Moore, M.D., to assistant professor of surgery; E. K. Hall, to professor of anatomy; Ji-Toong Ling, M.D. to associate professor of radiology; and Charles T. Moran, M.D., to professor of ophthalmology.

Doctor Freeman Fountain resigned as assistant professor of physical medicine and rehabilitation. The trustees voted to accept a $10,000 check from the Kentucky Division of the American Cancer Society to be applied toward the salary of the Medical School's director of cancer training.

Services of Central Repository Now Available to M.D.'s

The services of a Central Repository for Medical Credentials became available to physicians of the world in July of this year under the sponsorship of the World Medical Association.

Designed so that a doctor will always be able to prove himself medically trained and fully accredited to practice medicine, the service has a lifetime cost on a one-payment basis to newly graduated physicians of $60. An actuarial schedule has been established for doctors in the various age groups. A ten-year service rate is also available.

Repository officials suggest that credentials deposited include official medical school record, medical diploma, and specialist credentials. American physicians should *not* send their original credentials, but should send photostatic, microfilm, or notarized copies of their original credentials.

Requests for forms and additional information in regard to the Central Repository for Medical Credentials should be sent to the World Medical Association, 10 Columbus Circle, New York 19, New York.

Dean Officer on College Assoc.

J. Murray Kinsman, M.D., dean of the University of Louisville School of Medicine, has been elected treasurer of the Association of American Medical Colleges. The Association sets standards for all American medical schools. It held its Annual Meeting in Philadelphia in October.

Disability Benefit Changes Enacted Under the 1958 Amendments

On August 29, President Eisenhower signed House Resolution 13549. This legislation represented the third major change in the social security disability program which in 1954 provided that disabled persons who qualified could freeze their benefit and in 1956 provided for cash payments to qualified disabled persons.

Three major changes were enacted under the 1958 amendments. Dependents of disabled workers are now eligible for benefits; the work requirements have been changed; and the receipt of other disability benefits is no longer a ban to social security payments.

Under the old law, dependents of disabled workers who were receiving cash disability payments were not eligible for benefits. Monthly payments, beginning with September 1958, can now be made to dependents. Dependents include minor children under age 18; disabled children 18 years of age or older if the disability began before their 18th birthday; wives age 62 or over; and wives under age 62 if they have a child in their care who is under age 18, or over 18 and disabled prior to age 18.

To be eligible for disability benefits at age 50 or to have their social security records frozen, disabled workers have until now needed to meet two work requirements (in addition to being too disabled to engage in any substantial gainful activity): (1) They must have worked under social security for at least five out of ten years before becoming disabled; and, (2) at least a year and a half of their work under social security must have been during the three years just before they became disabled for work. The second work requirement has been removed under the 1958 amendments. Although the work requirements for disability have been changed, no change has been made in the requirements as to the severity of disability.

Beginning with payments for the month of August 1958, disabled persons may be paid their full social security benefits even if they also get State workmen's compensation benefits or some type of disability payment from the Federal Government. Until the 1958 amendments, social security disability benefits were reduced by the amount of such other payments.

J. DUFFY HANCOCK, M.D., Louisville
Chairman, Medical Advisory Committee
Social Security Administration

Auxiliary Honors Mrs. Venable

Mrs. Elizabeth Venable, Louisville, received the Health Award of the Woman's Auxiliary to the KSMA at the Auxiliary Luncheon on September 24. The award is given annually for outstanding contributions by a layman to the promotion of health and health education in the state. Mrs. Venable was cited for her work in educating mentally retarded children. Since 1953 she has been an educational director at the Stevens School for Retarded Children—a volunteer job.

Was Your Delegate Present?

ROLL CALL—1958 House of Delegates*

	OFFICERS	First Session	Second Session
Speaker	Clyde C. Sparks	Present	Present
Vice Speaker	George W. Pedigo, Jr.	Present	Present
President	Edward B. Mersch	Present	Present
President-Elect	Robert W. Robertson	Present	Present
Vice President	John S. Harter	Present	Present
Vice President	Richard G. Elliott	Present	Present
Vice President	Walter Byrne	Present	....
Secretary-Treasurer	Woodford B. Troutman	Present	Present
Delegate to the AMA	W. Vinson Pierce	Present	Present
Delegate to the AMA	Robert C. Long	Present	Present
	COUNCILORS		
District			
First	J. Vernon Pace	Present	Present
Second	Walter L. O'Nan	Present	Present
Third	Ralph D. Lynn	Present	Present
Fourth	W. Keith Crume	Present	Present
Fifth	Carlisle Morse	Present	Present
Sixth	John P. Glenn	Present	Present
Seventh	Branham B. Baughman	Present	Present
Eighth	Norman Adair	Present	Present
Ninth	J. M. Stevenson	Present	Present
Tenth	J. Farra Van Meter	Present	Present
Eleventh	Joe M. Bush	Present	Present
Twelfth	Garnett J. Sweeney	Present	Present
Thirteenth	Charles B. Johnson	Present	....
Fourteenth	Charles C. Rutledge	Present	Present
Fifteenth	Keith P. Smith	Present	Present
	PAST PRESIDENTS		
1956	Richard R. Slucher	Present	Present
1955	Gant Gaither	....	....
1954	Clyde Sparks**	Present	Present
1953	J. Duffy Hancock	Present	Present
1952	G. Y. Graves	....	Present

County	Delegate	First Session	Second Session
	FIRST DISTRICT		
BALLARD	Goodloe Sargent	Present	....
CALLOWAY	Hugh L. Houston (alternate)	Present	....
	Conrad H. Jones	....	....
CARLISLE	John T. O'Neil	....	....
FULTON	R. W. Bushart	....	....
GRAVES	Robert A. Orr	Present	Present
HICKMAN	V. A. Jackson	Present	....
LIVINGSTON	Roy Waddell	....	....
MCCRACKEN	Walter Johnson	....	....
	Walker Turner	Present	Present
	Leon Higdon	Present	Present
MARSHALL	Joseph R. Miller	Present	Present
	SECOND DISTRICT		
DAVIESS	Charles B. Wathen	....	....
	Howell J. Davis	Present	....
HANCOCK	F. Hays Threlkel	Present	Present
HENDERSON	Robert L. Summer	Present	Present
MCLEAN	W. Gerald Edds	....	Present
OHIO	Albert H. Joslin	Present	Present
UNION			
WEBSTER			
	THIRD DISTRICT		
CALDWELL	B. K. Amos	....	....
CHRISTIAN	James Dade	....	....
	Rachel Croft (alternate)	....	Present
	Robert Coleman	....	....
	Delmas Clardy (alternate)	Present	Present
CRITTENDEN	R. M. Brandon	....	....
HOPKINS	Loman C. Trover	Present	Present
LYON	John E. Cotthoff	Present	....
MUHLENBERG	G. L. Simpson	Present	....
	G. L. Brockman (alternate)	....	Present
TODD	J. C. Woodall	Present	Present
TRIGG	Thornton Bryan, Jr.	Present	Present
	FOURTH DISTRICT		
BRECKINRIDGE	W. R. Morris	....	....
BULLITT	H. S. Spalding	Present	....
GRAYSON	Ralph Thomas	Present	Present
GREEN	Robert Shuffett	Present	Present
HARDIN	R. T. Routt	Present	Present
	William H. Barnard	Present	Present
HART	Fred J. Cecil	Present	Present
LARUE	J. D. Handley	....	....
MARION	David Drye	....	....
	Edwin C. Bowling (alternate)	....	Present
MEADE	George E. Clark	....	....
NELSON	T. G. Forsee	Present	Present
TAYLOR	H. F. Chambers	Present	....
SPENCER	M. H. Skaggs	Present	....
WASHINGTON	M. A. Coyle	Present	Present
	FIFTH DISTRICT		
JEFFERSON	John D. Allen, Jr.	Present	Present
	William H. Bizot	Present	Present
	Henry S. Collier	Present	Present
	Richard F. Greathouse	Present	Present
	Blaine Lewis, Jr.	Present	Present
	Homer B. Martin	Present	Present
	Robert F. Monroe	Present	....
	Foster Coleman (alternate)	....	Present
	Everett N. Rush	Present	Present
	Robert S. Tillett	Present	Present
	L. Douglas Atherton	Present	Present
	McHenry S. Brewer	Present	Present
	W. Burford Davis	Present	Present
	Robert S. Dyer	Present	Present
	J. Thomas Giannini	Present	Present
	Robert Lich, Jr.	Present	....
	Stewart Hunter (alternate)	....	Present
	Thomas M. Marshall	Present	Present
	L. H. Segerberg	Present	Present
	Carroll L. Witten	Present	Present
	Benjamin D. Boone	Present	Present
	Thomas V. Gudex	Present	Present
	Roy A. Martin	Present	Present
	Max P. Jones	Present	Present
	Robert L. McClendon	Present	Present
	Alfred O. Miller	Present	Present
	F. Albert Olash	Present	Present
	William E. Oldham	Present	....
	R. R. Burnam (alternate)	....	Present
	Rudolph F. Vogt	Present	Present
	SIXTH DICTRICT		
ADAIR	M. C. Loy	Present	....
ALLEN	Owen Davis	....	Present
BARREN	William Bryant	Present	Present
BUTLER	D. G. Miller	....	Present
CUMBERLAND			
EDMONSON			
LOGAN	C. V. Dodson	Present	....
METCALFE	E. S. Dunham	....	....
MONROE	C. A. Crabtree	....	Present
SIMPSON	L. F. Beasley	Present	Present
WARREN	Harold Keen	Present	Present
	Harper Wright	Present	....
	SEVENTH DISTRICT		
ANDERSON	Boyd Caudill	Present	....
CARROLL	H. C. Boylen	....	....
FRANKLIN	Joseph Liebman	Present	Present
GALLATIN	G. F. Harris	....	Present
GRANT	F. R. Scroggin	Present	Present
HENRY	R. L. Houston, Jr.	Present	Present
OLDHAM	Edward G. Houchin	Present	Present
OWEN	O. A. Cull	....	....
SHELBY	M. D. Klein	Present	....
	A. D. Doak (alternate)	....	Present
TRIMBLE	Carl Cooper, Jr.	Present	Present
	EIGHTH DISTRICT		
BOONE	Gladys L. Rouse	Present	Present
CAMPBELL-KENTON	Walker Air	Present	Present
	John Cassidy	....	....
	R. Charles Smith (alternate)	....	Present
	Carl Kumpe	....	....
	W. T. McElhinney (alternate)	....	Present
	Marc Reardon	Present	Present
	Richard Rust	Present	Present
	NINTH DISTRICT		
BATH			
BOURBON	I. Zapolsky	....	....
	William H. Cox (alternate)	Present	....
BRACKEN	Carl A. Marquardt	Present	Present
FLEMING	R. W. Fidler	Present	Present
HARRISON	J. P. Wyles	....	....
MASON	William Cartmell	Present	Present
NICHOLAS			
PENDLETON	William M. Townsend	Present	Present
ROBERTSON	Perry Ovetby	....	....
SCOTT	H. G. Wells	Present	Present
	TENTH DISTRICT		
FAYETTE	John W. Scott	Present	Present
	T. L. Adams	Present	Present
	Carl H. Fortune	Present	Present
	Maurice Kaufman	Present	....
	T. R. Bryant	Present	Present
	R. G. Elliott***	Present	Present
	C. C. Johnston	Present	....
	N. L. Posworth	Present	Present
JESSAMINE	J. S. Williams	Present	Present
WOODFORD	F. D. Willey	....	....
	ELEVENTH DISTRICT		
CLARK	R. L. Davis	Present	Present
ESTILL	R. R. Snowden	....	....
JACKSON			
LEE			

County	Delegate	First Session	Second Session
MADISON	Douglas Jenkins	Present	Present
	Hubert Jones	Present	Present
MENIFEE	D. L. Graves	....	....
MONTGOMERY	William McKenna	Present	Present
OWSLEY	M. B. Gabbard	....	Present
POWELL	S. T. Scrivner	....	....
WOLFE	Paul F. Maddox	Present	Present
	TWELFTH DISTRICT		
BOYLE	Chris Jackson	....	....
CASEY			
CLINTON	Ernest A. Barnes	....	....
GARRARD	O. S. Playforth	Present	....
	Paul Sides (alternate)	....	Present
LINCOLN	H. I. Frisbie	....	....
MCCREARY			
MERCER	T. O. Meredith	Present	Present
PULASKI	Trent Weddle	....	....
	B. L. Ramsey (alternate)	Present	....
ROCKCASTLE	Walter Owen	....	....
RUSSELL			
WAYNE	Mack Roberts	Present	....
	THIRTEENTH DISTRICT		
BOYD	Philip J. Winn	....	....
	W. V. Lyon	Present	....
CARTER	J. Watts Stovall	Present	Present
ELLIOTT	John F. Greene	....	....
GREENUP	Billy Riddle	....	....
LAWRENCE	George P. Carter	Present	....
LEWIS			
MORGAN	Hershell B. Murray	Present	Present
ROWAN			
	FOURTEENTH DISTRICT		
BREATHITT	F. C. Lewis	....	....
FLOYD	George P. Archer	Present	Present
JOHNSON	James W. Archer	Present	Present
KNOTT	Gene T. Watts	Present	....
LETCHER	T. M. Perry	Present	Present
MAGOFFIN			
MARTIN			
PERRY	C. D. Snyder	Present	....
PIKE	W. C. Hambley	Present	Present
	FIFTEENTH DISTRICT		
BELL	Charles B. Stacy	Present	Present
CLAY	W. E. Becknell	Present	Present
HARLAN	E. M. Howard	Present	Present
	Philip J. Begley	Present	Present
KNOX	W. P. Clifton	....	....
	T. R. Davies (alternate)	Present	....
LAUREL	Boyce E. Jones	Present	Present
LESLIE			
WHITLEY	W. M. Buttermore	Present	Present
TOTAL		129	125

**The information contained in the roll call was taken from the attendance record cards signed by the delegates prior to the meetings on Sept. 22-24.*
***Previously counted as speaker of the House.*
****Previously counted as vice president.*

Muldraugh Hill Society Meets in Louisville, Dec. 11

The Muldraugh Hill Medical Society will meet at 10 a.m. on Thursday, December 11, at St. Anthony's Hospital in Louisville, according to an announcement from Joseph C. Ray, M.D., Louisville, secretary.

Included in the meeting will be a luncheon at the hospital at 12:30 p.m. Following is a list of participants and their subjects: Israel Muss, M.D., Louisville, "The Human Electromyogram and Demonstration"; Lt. Col. Ralph Campbell, M.C., NP Service, Ireland Army Hospital, Fort Knox, Ky., "Character and Behavior Disorders"; Harry Lehman, Jefferson County Medical Society, Louisville, "The Best Medical Care for all Kentuckians"; Major John Sarracino, M. C., Pediatric Section, Ireland Army Hospital, Fort Knox, "Diarrhea in Infancy and Childhood."

Also, Captain David Hilding, ENT Section, Ireland Army Hospital, "Tuberculosis Adenitis in the Neck"; Patrick Cummings, M.D., Louisville, "Clinicopathological Conference"; Burton Heine, M.D., "The Solitary Pulmonary Nodule, Its Diagnosis and Treatment." An added feature of the meeting will be the appearance of Claude Layman, Louisville, president of the Kentuckiana Lost Chords Club.

Have Baby—Will Travel

When the stork arrived a week early at the home of the intended "star" of the Caesarean Section planned for color television at the Annual Meeting —the committee in charge faced the dilemma of getting a new star or cancelling the program.

The Louisville papers and the news services picked up the story and soon it was in papers throughout the nation. Volunteers for the spot—later filled by a 16-year-old Louisvillian — came from expectant mothers in California, Pennsylvania, and New Mexico.

Typical of the offers was even an urgent telegram saying "Am willing to substitute for your television closed circuit caesarean birth. Mother and I ready to travel immediately."

Dr. Witten Gets AAGP Office

Carroll L. Witten, M.D., was recently elected chairman of the State Officers Conference of the American Academy of General Practice in Kansas City, Missouri. The conference is composed of state chapter officers of the academy. Doctor Witten is a delegate from Kentucky.

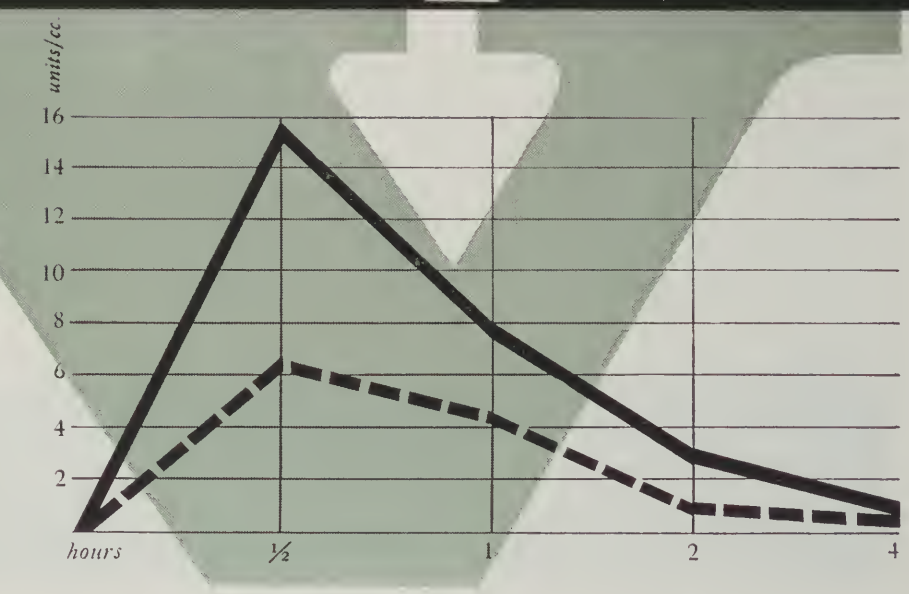
KPHA Sponsoring "Idea" Contest

A contest for the most constructive ideas contributing to the overall improvement of public health in Kentucky is open to all members of the Kentucky Public Health Association, according to Nick G. Johnson, chairman, Contest Committee. Each person entering the contest may offer as many suggestions as he wishes with suggestions not over a page in length. Suggestions should be practical, feasible, and have state-wide application. Prizes will be awarded—$25, first prize; $15, second prize; and $10, third prize.

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MEMBER AMERICAN HOSPITAL ASSOCIATION.

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Doses of 400,000 units were administered before mealtime to 40 subjects involved in this study.

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blood levels of
potassium
penicillin V

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potassium penicillin V

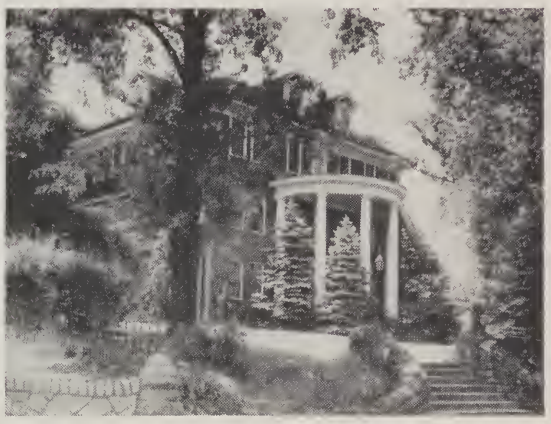
IN FILMTABS,
COMPOCILLIN-VK comes in 125 mg. (200,000 units), bottles of 50 and 100, and in 250 mg. (400,000 units), bottles of 25 and 100.

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COMPOCILLIN-VK comes in dry granules for easy reconstitution with water. Cherry flavored, the granules are in 40-cc. and 80-cc. bottles. Each 5-cc. teaspoonful represents 125 mg. (200,000 units) of potassium penicillin V.

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Affiliated with Duke University





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R. CHARMAN CARROLL, M.D.
Medical Director

ROBERT L. CRAIG, M.D.
Associate Medical Director

JOHN D. PATTON, M.D.
Clinical Director

50 GP's at Big Sandy in October

About 50 Kentucky physicians attended the Big Sandy Seminar of the Kentucky Academy of General Practice at the Green Meadow Country Club in Pikeville on October 16.

The meeting included scientific sessions, luncheon, dinner, and a meeting of the KAGP Board of Directors that evening. R. W. Allen, M.D., Pikeville, was chairman of the meeting.

NEWS ITEMS

M. A. Shepherd, M.D., has resigned as county health officer for Henderson, Union, and Webster counties to attend the University of North Carolina, Chapel Hill, for a master of public health degree. He had served in the post for two years, coming to Henderson from general practice in Harrodsburg, Kentucky.

William M. Moses, M.D., former chief resident in surgery and instructor at Meharry Medical College, Nashville, has opened offices in Louisville for the practice of surgery. A graduate of Meharry Medical College in 1949, he completed his internship at the Homer Phillips Hospital, St. Louis. He took his residency training in surgery both at Meharry and at the Memorial Center for Cancer and Allied Diseases in New York City and has served two years as a surgeon with the 11th Airborne Division.

Robert T. Longshore, M.D., a graduate of the University of Louisville School of Medicine in 1957, has started the general practice of medicine in Covington. Doctor Longshore, who interned at St. Elizabeth Hospital, Covington, will share offices with John D. Redden, M.D.

Captain Robert W. Beasley, a surgeon in the U. S. Army Medical Corps and a native of Paducah, has been cited by General Walter A. Jensen, former commanding general of the Armor Combat Training Center at Camp Irwin in California, for outstanding service. Captain Beasley graduated from the University of Tennessee School of Medicine in 1955 and received his surgical training at Roosevelt Hospital in New York City until June, 1957 when he was called into the service.

Elbert G. Christian, M.D., internist, and **O. James Hurt, M.D.,** orthopedic surgeon, have opened joint offices in St. Matthews. A native of Ohio, Doctor Christian graduated from the University of Louisville School of Medicine in 1954. He interned one year at Louisville General Hospital and served two years of residency training at Veterans Administration Hospital, Louisville. Doctor Hurt, a native of Hindman, graduated from the University of Louisville School of Medicine in 1947 and interned for a year at Maryland General Hospital, Baltimore. For more than four years he was in general practice at Campbellsville and Bedford and served two years as a captain in the Army. He took three years of residency training at Louisville General and Kosair Hospital and is now acting chief of orthopedics at the Veterans Administration Hospital.

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Reduce fever

Alleviate the general malaise of upper respiratory infections

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Aspirin (Acetylsalicylic Acid) . . . . . gr. 3½

'CODEMPIRAL'® NO. 2*



Codeine Phosphate . . . . . gr. ¼
Phenobarbital . . . . . gr. ¼
Acetophenetidin . . . . . gr. 2½
Aspirin (Acetylsalicylic Acid) . . . . . gr. 3½

...from pain of muscle and joint origin, simple headache, neuralgia, and the symptoms of the common cold.

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'EMPIRIN' COMPOUND®



Acetophenetidin . . . . . gr. 2½
Aspirin (Acetylsalicylic Acid) . . . . . gr. 3½
Caffeine . . . . . gr. ½

...from mild pain complicated by tension and restlessness.

'EMPIRAL'®



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Aspirin (Acetylsalicylic Acid) . . . . . gr. 3½

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In Memoriam

H. C. BRUNER, M.D.
Louisville
1879-1958

Henry C. Bruner, M.D., a graduate of the University of Louisville School of Medicine in 1902, died on September 24 at Kentucky Baptist Hospital in Louisville.

After graduation from medical school, he practiced in Hart County for many years. During World War II, he was assistant medical director at E. I. duPont de Nemours and Company plant here. Before retiring in 1955, he was affiliated with the Veterans Administration.

WILLIAM BAINE MOORE, M.D.
Louisville
1877-1958

William B. Moore, M.D., who had practiced medicine for 59 years, died in Louisville on September 20 after an illness of nine months. He was an emeritus member of the Association.

Doctor Moore graduated from the University of Tennessee Medical College in 1899 and practiced medicine in Caldwell County for 14 years before moving to Louisville. A member of a family of physicians, he has a son and two brothers practicing medicine in Louisville.

FRANK BOYD, M.D.
Paducah
1871-1958

Frank Boyd, M.D., 91, Paducah's oldest physician, died on September 27 at Western Baptist Hospital in Paducah. Doctor Boyd, whose medical practice spanned 62 years, had retired from active practice four years ago because of declining health.

A graduate of Rush Medical College in Chicago, he was president of the KSMA in 1924 and received a 50-year pin from the Association at the 1949 meeting. With the exception of medical duty in the U. S. Army during the Spanish-American War, Doctor Boyd practiced only in Paducah.

HARRY K. DILLARD, M.D.
Lexington
1911-1958

Harry K. Dillard, M.D., president of the Kentucky Public Health Physicians, died in Central Baptist Hospital in Lexington on October 9. He had been Lexington-Fayette County health officer since 1955.

Doctor Dillard was at one time in private practice at Wayland and Warsaw, Ky., and was director of the Division of School Health at the State Department of Health and regional director of the County Health Division before going to Lexington. He was formerly a lieutenant colonel in the U. S. Army. Doctor Dillard graduated from the University of Louisville School of Medicine in 1937.



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Joint inflammation and muscle spasm are the two elements most responsible for disability in rheumatic-arthritic disorders—and MEPROLONE is the one agent that treats both.

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MEPROLONE-2 is indicated in cases of severe involvement, yet often leads to a reduction of steroid dosage because of its muscle-relaxant action. When involvement is only moderately severe or mild, MEPROLONE-1 may be indicated.

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In Memoriam (continued)

MARVIN COFFMAN, M.D.
Owensboro
1879-1958

Marvin Coffman, M.D., Owensboro, died at Owensboro-Daviess County Hospital on September 25 after a brief illness. A native of Kentucky, he started his practice in Owensboro in 1905 with his brother, the late Kent Coffman, M.D.

A graduate of Emory University School of Medicine in Atlanta, Georgia, he was a past president and charter member of the Owensboro Rotary Club and an active member of the Owensboro Investigators Club. He was also an elder in the First Presbyterian Church.

JOHN T. CARMAN, M.D.
Franklin
1870-1958

John T. Carman, M.D., died in the hospital in Franklin on October 1 after an illness of about six weeks. He had been retired from active practice and had been in the hospital since August 24, when he suffered a broken limb in a fall at his home.

Doctor Carman graduated from the University of Tennessee School of Medicine in Nashville in 1898 and had practiced medicine in Franklin for about 40 years. In 1949, he received the Golden T for 50 years of service to his fellow. He was a native of Tennessee.

GEORGE H. WILSON, M.D.
Lexington
1884-1958

George H. Wilson, M.D., medical director of Lexington city schools, died on September 26 while on duty at one of the schools. He was a past president of the Fayette County Medical Society.

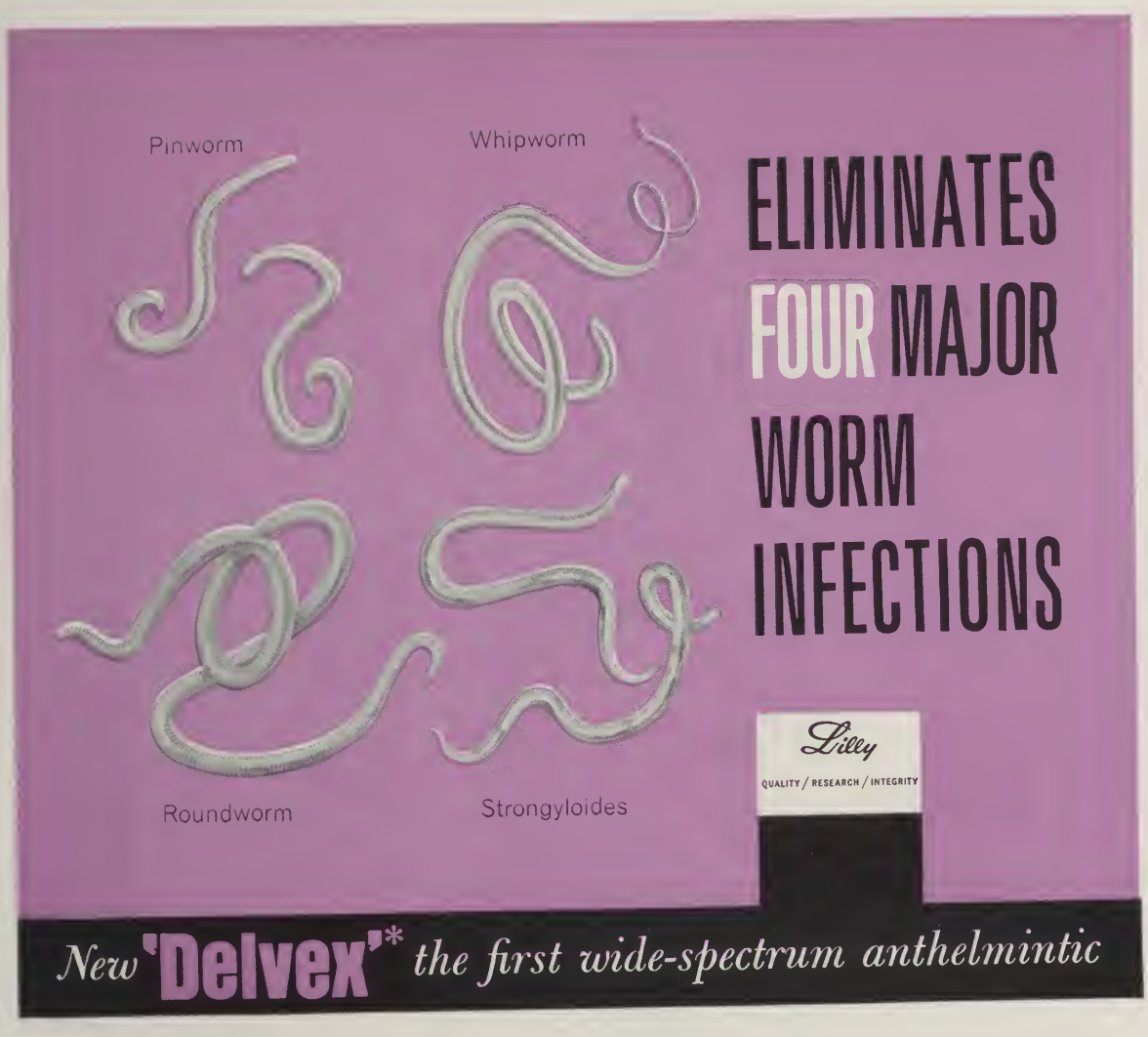
A physician in Lexington since 1913, during World War I he assisted the late David Barrow, M.D., in organizing Base Hospital 40 and served overseas with this unit. Doctor Wilson graduated from the University of Michigan Medical School in 1910. He was a former trustee of the University of Kentucky and executive board member of the university's alumni association.

Three Bahama Conferences are being planned for the winter months. First is the Sixth Bahamas Medical Conference from November 28 to December 18, second is the First Bahamas Surgical Conference from December 29 to January 17, and third is the Serendipity Session from January 18 to 31. All sessions will be held at the newly redecorated British Colonial Hotel at Nassau. Further details on rates and program of the various conferences may be obtained by writing B. L. Frank, M.D., 23 East 79th Street, New York 21, New York.

The Julius Marks Sanatorium in Lexington was recently accredited for a period of three years by the Joint Commission on Accreditation of Hospitals. The accreditation was the result of a survey conducted on July 30, 1958.



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Pinworm	Whipworm
Roundworm	Strongyloidiasis

- It also inhibits, and sometimes eliminates, hookworm infection.
- It is fully effective in both single and multiple infections and in both heavy and light infections.
- It eliminates pinworm infection in 100 percent of patients.
- It is the first effective and practicable agent for the oral treatment of strongyloidiasis and whipworm infection.
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Further information and clinical reports may be obtained from your Lilly representative or by writing to our Medical Department.

*'Delvex' (Dithiazanine Iodide, Lilly)
1. Swartzwelder, J. C., et al.: J. A. M. A., 165:2063, 1957.

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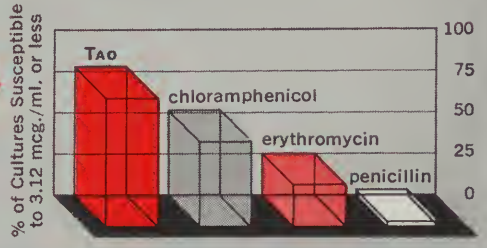
effective . . .

CLINICAL RESULTS	adults	children	all Staph infections
Cured	172 (80%)	148 (89%)	71 (88%)
Improved	28 (13%)	8 (5%)	7 (9%)
Failure	17 (7%)	11 (6%)	3 (3%)

Types of infecting organisms: The majority of identified etiologic microorganisms were Staph. aureus and Staph. albus. Tao has its greatest usefulness against organisms such as: staphylococci (including strains resistant to other antibiotics), streptococci (beta-hemolytic strains, alpha-hemolytic strains and enterococci), pneumococci, gonococci, Hemophilus influenzae.

even against resistant staph[1,2] . . .

Per cent of "antibiotic-resistant" epidemic staphylococci cultures susceptible to Tao, erythromycin, penicillin and chloramphenicol.[1]



well tolerated . . .

REACTIONS:

(a) adults	(b) children
Total—9.2% (20 out of 217)	Total—0.6% (1 out of 167)
Skin rash—1.4% (3 out of 217)	Skin rash—none
Gastrointestinal—7.8% (17 out of 217)	Gastrointestinal—0.6% (1 out of 167)

There was complete freedom from adverse reactions in 94.5% of all patients. Side effects in the other 5.5% were usually mild and seldom required discontinuance of therapy.

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References: 1. English, A. R., and Fink, F. C.: Antibiotics & Chemother. (Aug.) 1958. 2. English, A. R., and McBride, T. J.: Antibiotics & Chemother. (Aug.) 1958. 3. Wennersten, J. R.: Antibiotic Med. & Clin. Therapy (Aug.) 1958. 4. Celmer, W. D., et al.: Antibiotics Annual 1957-1958, New York, Medical Encyclopedia, Inc., 1958, p. 476.

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In The Books

(Continued from page 1070)

Several sections, such as those concerning the esophagus, gastrointestinal bleeding, diagnosis and treatment of gastritis, the liver, portal hypertension and esophageal varices, are exceptionally well written and may be regarded as authoritative. This is to be expected from the many original contributions to the literature on these topics by Dr. Palmer. The illustrations, particularly the numerous lucid drawings, are excellent. Many will find appealing the refreshing style of writing with which the material is presented.

Everyone with any interest in diseases of the gastrointestinal tract would profit considerably from reading the book. This especially includes the gastroenterologist; he should be most stimulated by the controversial aspects of what he will find.

Malcomb Stanley, M.D.

A TEXTBOOK OF CLINICAL NEUROLOGY: by Israel S. Wechsler, M.D.; published by W. B. Saunders Company, Philadelphia and London, January, 1958; Eighth Edition; 782 pages; 179 figures; price, $11.

Wechsler's textbook of Clinical Neurology has served for many years as one of the basic texts for students of Neurology in this country. The quality of both subject matter and presentation has been excellent although somewhat tedious.

The eighth edition is planned for everyone. Much of the extraneous material has been deleted and only direct understandable discussion of most all neurological conditions is presented. It seems much easier to read and retain what is presented in this edition than in his previous edition.

The newer advances in neurology are presented. The chapter on epilepsy has been changed considerably for the better. Many new photo-micrographs and accompanying diagrams have been added giving one a better total picture of the entity under discussion. Nothing, however, is mentioned of neurochemistry and the reticular formation which have gained so much attention in recent years.

The bibliography has been increased. This textbook, however, remains one for the physician in the practice of general medicine and neurology. There are better texts available for one interested in clinical research.

The chapter on the neurosis has been retained. There is a brief and logical discussion on each which certainly parallels in quality that presented in most standard psychiatric textbooks.

The History of Neurology is presented as the final chapter. This is of particular interest to the medical historian, but enjoyable for all physicians.

Richard L. Roth, M.D.

(Continued from page 1109)

in an eighty-five-year-old man: successful resection and replacement by Orlon prosthesis, A.M.A. Arch. Surg. *73*:729-732 (Oct.) 1956.

12. Ruptured aortic aneurysm—A surgical emergency, Editorial, Surg. Gynec. and Obst. *98*:759 (June) 1954.

13. Sanger, P. W., Taylor, F. H., McCall, R. E., Duchesne, R., and Lepage, G.: Seamless synthetic arterial grafts, J.A.M.A. *160*:1403-1404 (Apr.) 1956.

14. Zech, R. K., and Merendino, K. A.: A study of one hundred and sixteen aneurysms of the aorta and iliac arteries with remarks concerning surgical attitudes, Am. Surg. *20*:1150-1161 (Nov.) 1954.

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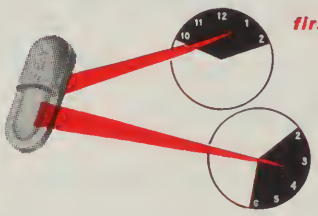
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References: 1. Spies, T. D., et al.: J.A.M.A. 159:645, 1955. 2. Spies, T. D., et al.: Postgrad. Med. 17:1, 1955. 3. Gelli, G., and Della Santa, L.: Minerva Pediat. 7:1456, 1955. 4. Guerra, F.: Fed. Proc. 12:326, 1953. 5. Busse, E. A.: Clin. Med. 2:1105, 1955. 6. Sticker, R. B.: Panel Discussion, Ohio State M. J. 52:1037, 1956.

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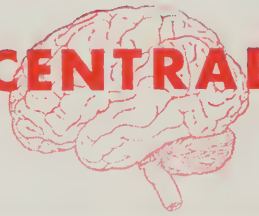
1. Meprobamate is more widely prescribed than any other tranquilizer. Source: Independent research organization; name on request.
2. Baird, H. W., III: A comparison of Meprospan (sustained action meprobamate capsule) with other tranquilizing and relaxing agents in children. Submitted for publication, 1958.

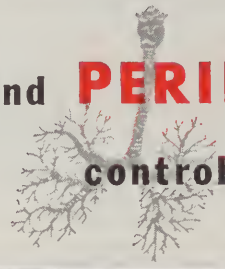
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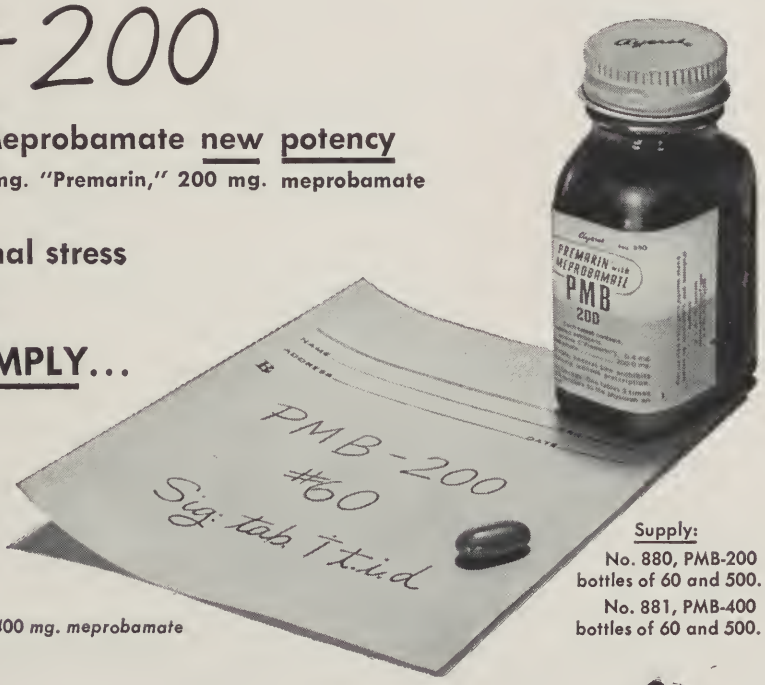
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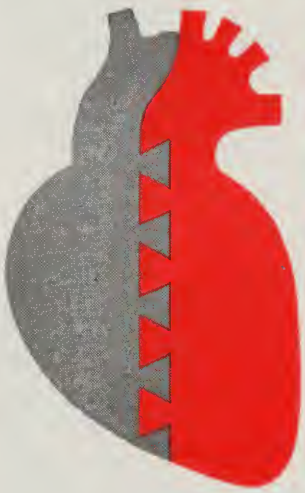
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1. *Friedlander, H. S.: The role of ataraxics in cardiology. Am. J. Card.* **1**:395, *March 1958.*
2. *Shapiro, S.: Observations on the use of meprobamate in cardiovascular disorders. Angiology* **8**:504, *Dec. 1957.*

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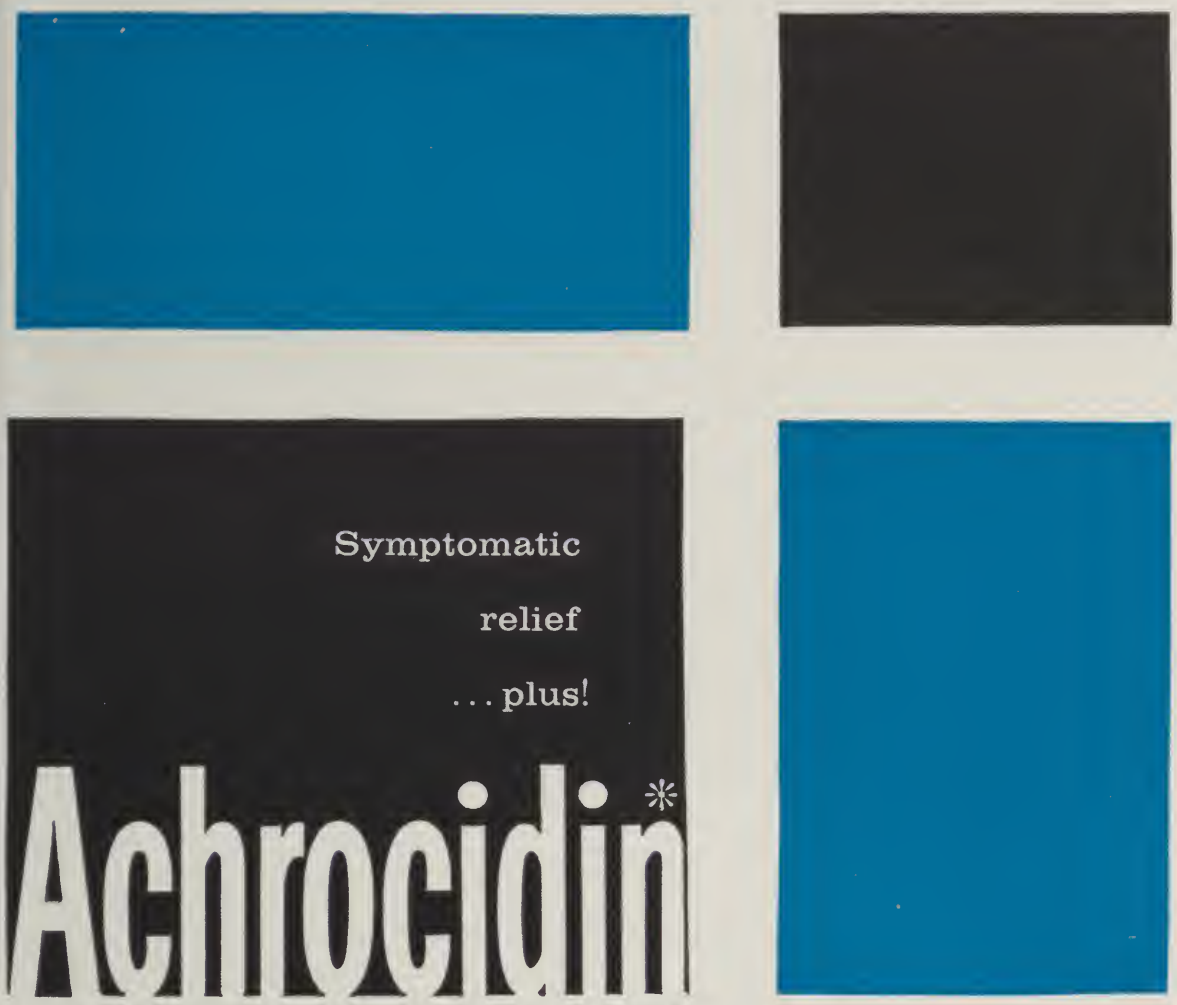
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PUBLISHED REFERENCES: 1. Carpenter, E. B.: Southern Medical Journal 51:627, 1958. 2. Forsyth, H. F.: J.A.M.A. 167:163, 1958. 3. Little, J. M., and Truitt, E. B., Jr.: J. Pharm. & Exper. Therap. 119:161, 1957. 4. Morgan, A. M., Truitt, E. B., Jr., and Little, J. M.: J. Am. Pharm. Assn., Sci. Ed. 46:374, 1957. 5. O'Doherty, D. S., and Shields, C. D.: J.A.M.A. 167:160, 1958. 6. Park, H. W.: J.A.M.A. 167:168, 1958. 7. Truitt, E. B., Jr., and Patterson, R. B., Proc. Soc. Exper. Bio. & Med. 95:422, 1957. 8. Truitt, E. B., Jr., Patterson, R. B., Morgan, A. M., and Little, J. M.: J. Pharm. & Exper. Therap. 119:189, 1957.

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STUDY 2[2]		"pronounced"			
Herniated disc	39	25	13	—	1
Ligamentous strains	8	4	4	—	—
Torticollis	3	3	—	—	—
Whiplash injury	3	2	1	—	—
Contusions, fractures, and muscle soreness due to accidents	5	3	2	—	—
STUDY 3[5]		"excellent"			
Herniated disc	8	6	2	—	—
Acute fibromyositis	8	8	—	—	—
Torticollis	1	—	—	1	—
STUDY 4[6]		"significant"			
Pyramidal tract and acute myalgic disorders	30	27	—	2	1
TOTALS	138	104 (75.3%)	28 (20.3%)	4	2

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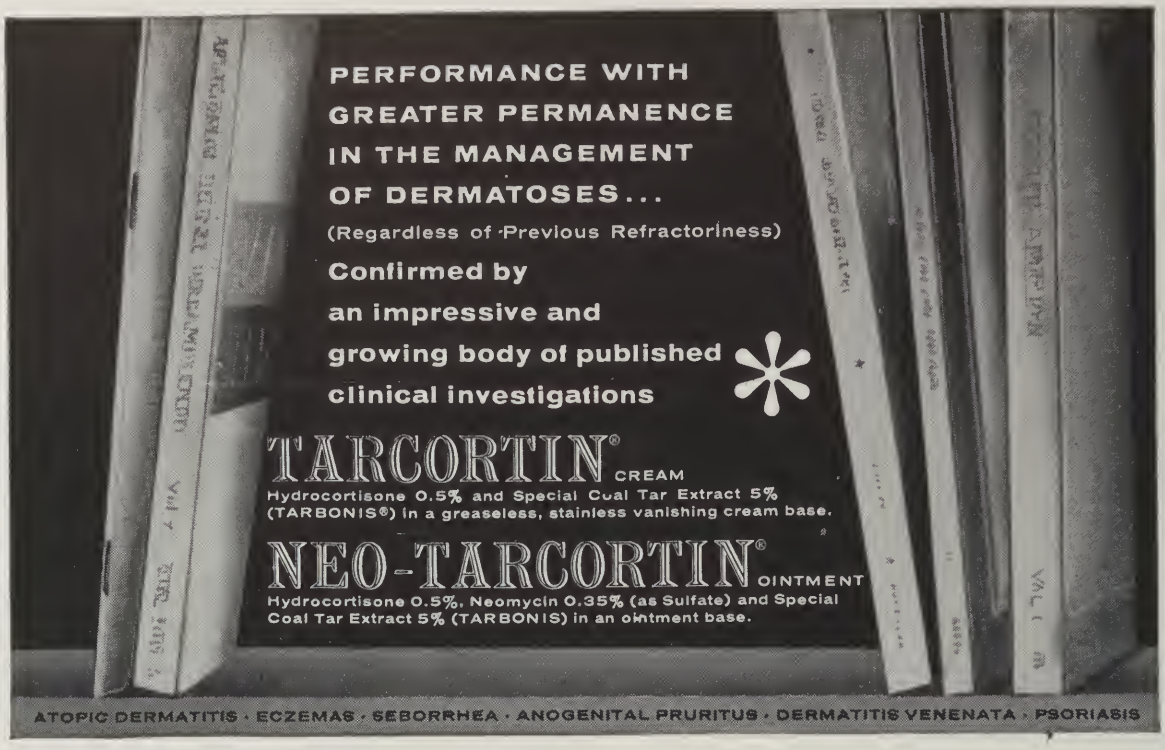
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3. Abrams, B. P., and Shaw, C.: Clin. Med. *3*:839, 1956.
4. Bleiberg, J.: Am. Practitioner *8*:1404, 1957.
5. Clyman, S. G.: Postgrad. Med. *21*:309, 1957.

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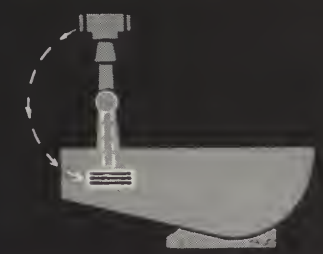
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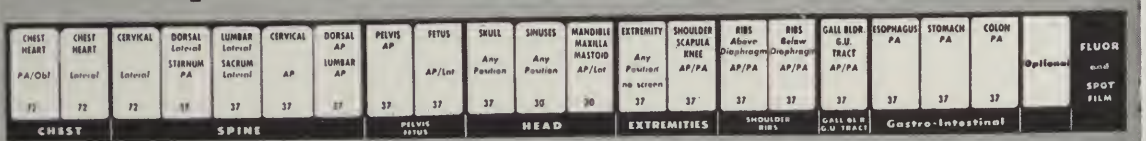


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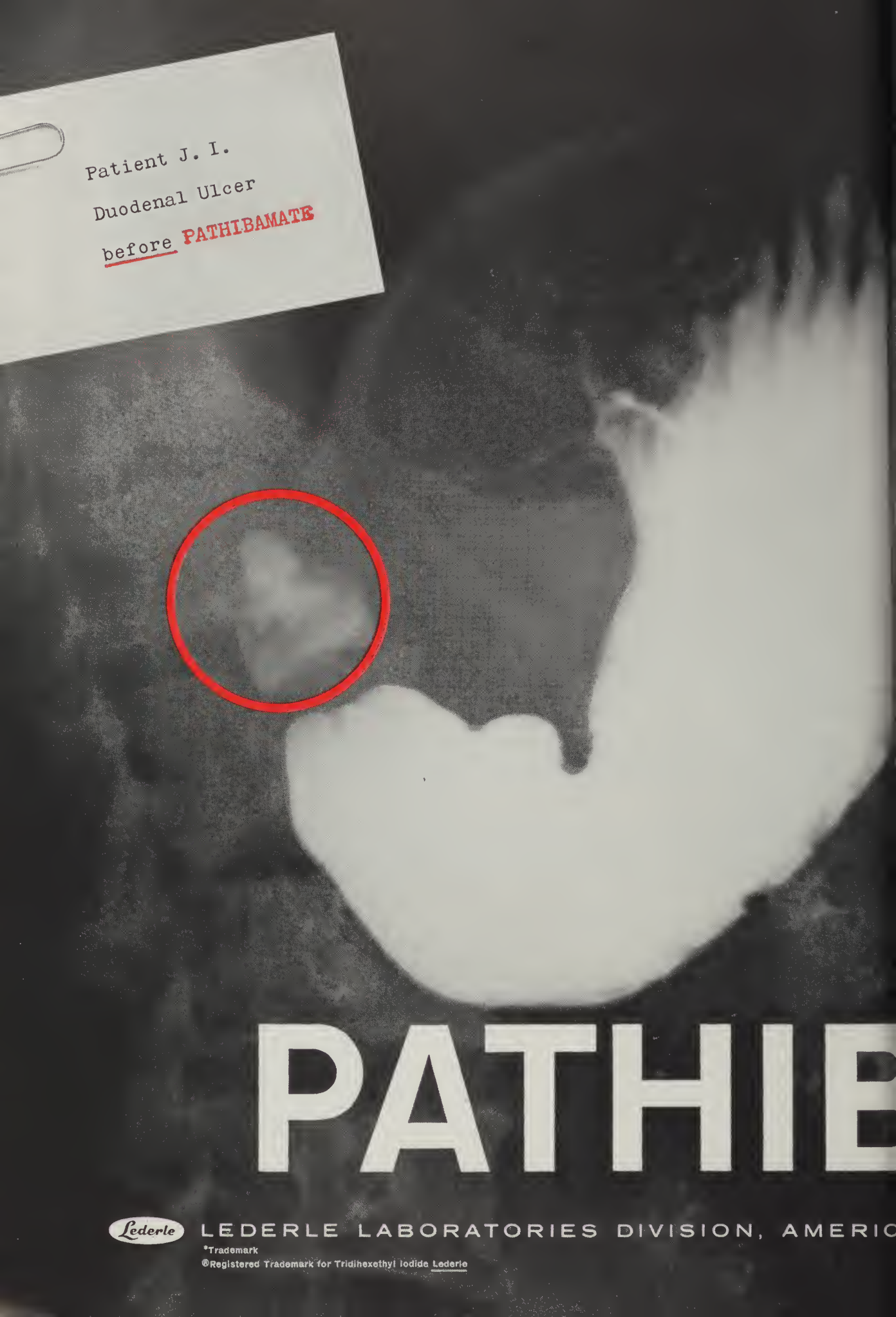
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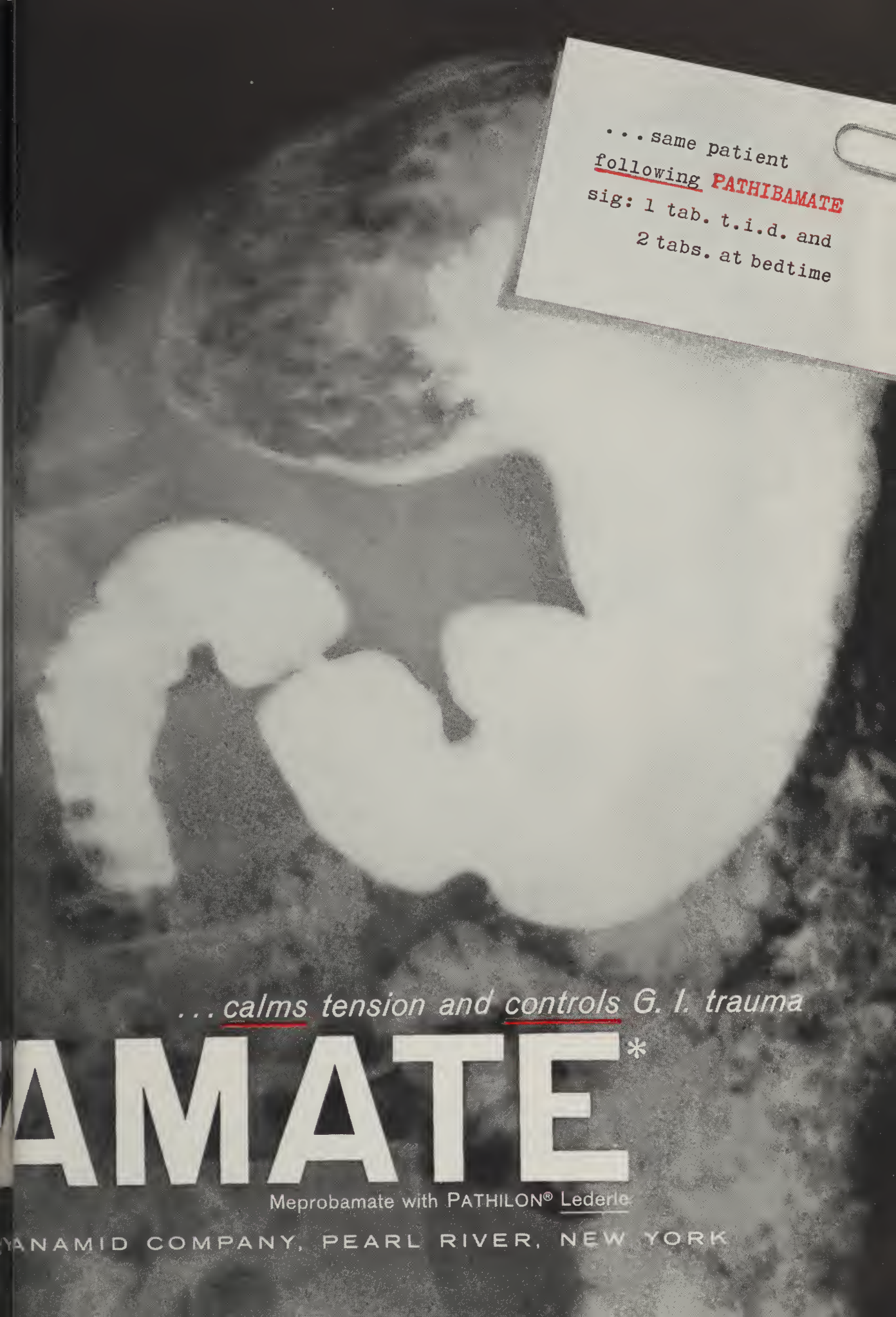
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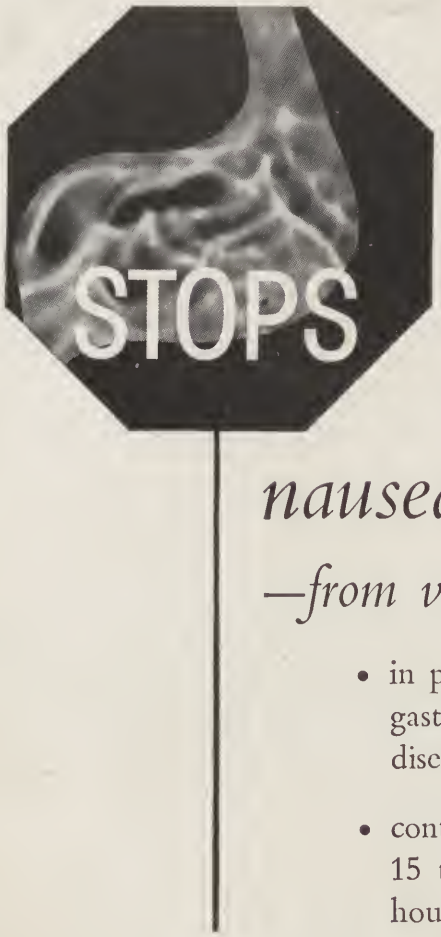
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Season's Greetings

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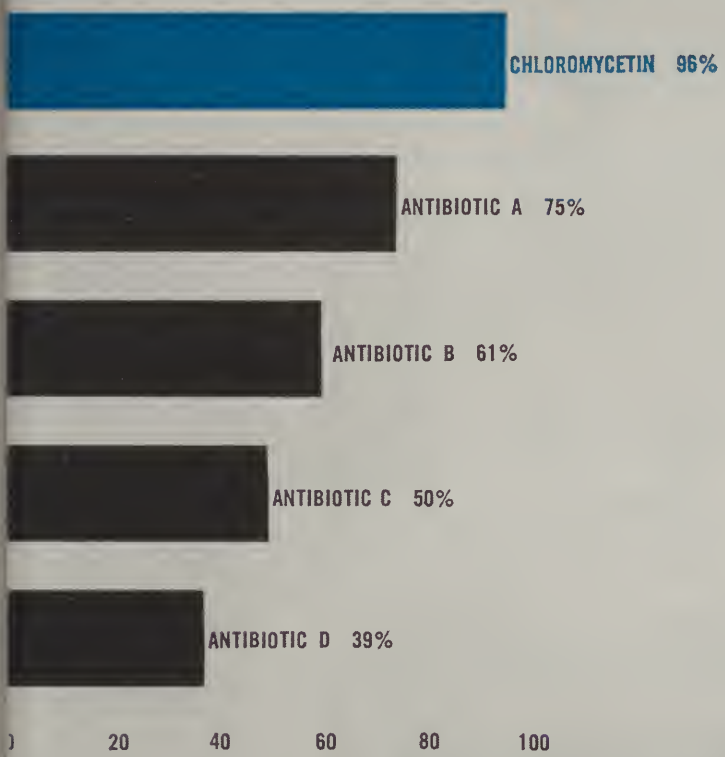
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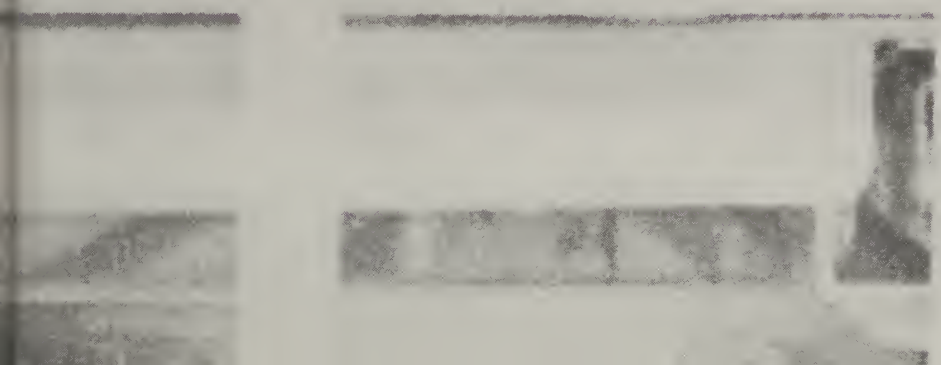


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IN VITRO SENSITIVITY OF PATHOGENIC STAPHYLOCOCCI TO CHLOROMYCETIN AND TO FOUR OTHER MAJOR ANTIBIOTICS*



*Adapted from Godfrey & Smith.[1] Staphylococci studied were strains isolated from 28 patients in a general hospital.



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(1) Hagedorn, A. B.: Proc. Staff Meet. Mayo Clin. **32**:705 (Dec. 11) 1957.
(2) Best, W. R.; Louis, J., and Limarzi, L. R.: M. Clin. North America (Jan.) 1958, p. 3.

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message from the President

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AS the Christmas season is a time for meditation, as well as celebration, I would like to share with you a few thoughts I gleaned from a little publication a year ago:

"Christmas is not just another day. It is the Great Fact of the Centuries around which a wealth of tradition has grown.

"Christmas is a spirit and the spirit of Christmas is Peace. Christmas is a gladness and gladness of Christmas is Hope. Christmas is a heart and experience and the experience of Christmas is Giving. Christmas is a celebration observed with the reverence of no other day."

No, Christmas is not just another day. It holds too much to be caught on the run without proper preparation for its observance. Schedule your days during the next two weeks so that you will not come up to December 25 with a case of jitters.

Enter Christmas Day with your whole self. The keeping of Christ's birthday depends on a full heart, not on a full purse.

So that your hearts may be filled with joy as the bright hour of that silver night approaches, I am inviting you to put the Christ back into Christmas. As a suggestion, read some of the world's greatest literature on Christmas, including His Story in Matthew and Luke, Dickens' "A Christmas Carol," Van Duke's "The Other Wise Man," and poems like John Milton's "On the Morning of Christ's Nativity."

Here's wishing you each and every one a Merry Christmas and a Very Happy New Year!

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SCHIZOPHRENIA: by Manfred Sakel, M.D.; published by the Philosophical Library, Inc., New York, N. Y.

THE DOCTOR BUSINESS: by Richard Carter; published by Doubleday and Company, Inc., New York 22, N. Y.

WHAT WE DO KNOW ABOUT HEART ATTACKS: by John W. Gofman, M.D.; published by G. P. Putnam's Sons, New York, N. Y.

HUMAN PARTURITION: NORMAL AND ABNORMAL LABOR: by N. F. Miller, M.D., T. N. Evans, M.D., and R. L. Haas, M.D.; 238 pages, price, $7.50.

These members of the Department of Obstetrics and Gynecology of the University of Michigan Medical School have written a book that has much to commend it. Written in outline form, it is concise, clear, easy to read and to understand. Thus, there is a great deal of information contained in this small volume.

Approximately one-half of this book is devoted to the mechanisms and clinical course of normal labor. The Power, Passage, Passenger concept is presented in the usual manner along with Feto-Pelvic relationships and Analgesia and Anesthesia.

The remainder of the book is devoted to abnormal labor and discusses such complications as Breech and Transverse Presentations, Prolonged Labor, Multiple Pregnancy, Forceps, Premature Labor and Postpartum Hemorrhage.

That a volume of this size should have some deficiencies is to be expected. That this book has so few is commendable. However, the latter half of the book dealing with abnormal labor is not nearly as well illustrated as it might be, and in the chapter dealing with Breech Presentations nothing is said about breech extraction.

In conclusion, several points should be emphasized. This book is intended to be a supplement to and not a replacement of the classic obstetric texts. It is written primarily for the student and the general practitioner and not for the specialist. It is intended to be an on-the-spot guide in labor and delivery suites for the conduct and management of normal and abnormal labor. In these respects this book is highly recommended.

Robert C. Long, M.D.

UROLOGY IN GENERAL PRACTICE: by Frank C. Hamm, M.D., and Sidney R. Weinberg, M.D.; published by J. Lippincott Company, Philadelphia, Pa., 1958; 287 pages; price, $6.

"Urology in General Practice" seems to be a reasonably successful effort by the authors to acquaint the general practitioners, internists, medical students, and anybody else who has diagnostic or therapeutic opportunities in urologic disorders with the scope of this specialty.

For these purposes a desirable balance between conciseness and completeness has been approached. It is possible for a busy doctor in five minutes to locate and review the pertinent (and generally accepted) facts of a urologic problem to reinforce his insight and direct his efforts at a successful solution.

For those unaware of basic urologic matters, the first five short chapters get into definition of terms, history taking, laboratory procedures, X-ray diagnosis, and discussion of diagnostic instrumentation.

The remaining fourteen chapters go into the whole gamut of urologic disorders generally under organ headings. In addition to discussions of the well-established urologic diseases, a very decent coverage is given to medical diseases of the kidney, electrolytes pertaining to kidney physiology, and endocrinology relevant to genital development and adrenal disorders, and there is a short chapter on identification of urologic disease in the presence of acute abdominal symptoms. Also succinctly included are appropriate descriptions of embryology and anatomy.

The book is well illustrated, and it seems to accomplish the objective set out for it.

L. Douglas Atherton, M.D.

CLINICAL OBSTETRICS AND GYNECOLOGY; Volume 1, Number 2; by Louis M. Hellman, M.D., and Robert A. Kimbrough, M.D., published by Paul B. Hoeber, Inc., Medical Book Dept., Harper and Brothers, New York, 1958, 544 pages.

This issue of the quarterly book series of Clinic Obstetrics and Gynecology covers two topics, "Toxemias of Pregnancy" edited by Dr. Louis M. Hellman, M.D. and "Fibromyomas of the Uterus" edited by Dr. Robert A. Kimbrough, M.D.

The section of Toxemias of Pregnancy is a very comprehensive and up-to-date discussion of this obstetric problem. The section on fluid and electrolyte metabolism is simple enough for understanding and does not lose the reader in a maize of equations and figures. The discussion of the pathologic abnormalities of toxemia is well covered. The use of

(Continued on Page 1284)

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PUBLIC HEALTH PAGE

Hospital Construction Under The Hill-Burton Act In Kentucky

RUSSELL E. TEAGUE, M.D.
Commissioner of Health
Commonwealth of Kentucky

Because of the great lack of hospital and medical facilities beds in the United States, Congress passed a grant-in-aid program, August 13, 1946, in the form of Public Law 725, popularly referred to as the Hill-Burton Act. The purpose of this Law was to make Federal funds, in the amount of $75,000,000, available on a matching basis for communities to construct general, mental, tuberculosis or chronic-disease hospitals, and public health centers. The Act called for the Federal Government to appropriate funds in the form of grant-in-aid to the states to assist the communities in constructing the five categories. Communities receiving funds were to furnish 66 2/3 per cent which was to be matched by Federal funds in the amount of 33 1/3 per cent. The Act was for a three-year period with funds to be appropriated each year to carry out the purposes of the Act.

An amendment to the Act was passed in October, 1949, which extended the authorization to June 30, 1955, and increased the annual appropriation to $150,000,000. This amendment also authorized an increase in Federal participation from 33 1/3 per cent to 66 2/3 per cent. The Kentucky Hospital Advisory Council, as was permitted under the Act, recommended and the State Authority, the Commissioner of Health, set the share at 50 per cent, which has been continued since that time. Since October, 1949, the Act has been extended three times and the present status of that authorization for the Act has been extended until June 30, 1964.

In addition to the above Public Law 725, Public Law 482 was passed in 1954 to become effective July 12, 1954, whereby Federal funds were to be made available to communities on a 50 per cent matching basis to construct diagnostic and treatment centers, chronic disease hospitals, rehabilitation facilities, and nursing homes. This Amendment authorized an appropriation of $60,000,000 per year.

(Continued on Page 1284)

STATUS OF PROJECTS UNDER THE HOSPITAL AND MEDICAL FACILITIES SURVEY AND CONSTRUCTION PROGRAM, BEGINNING IN 1947 TO NOVEMBER 1, 1958

Projects Completed, Now Under Construction, and Plans Being Prepared by Architects:	Total Cost	Federal Share
I. (1) 8 Projects in the Louisville Medical Center affiliated with University of Louisville School of Medicine	$ 16,694,371.11	$ 7,544,408.54
(2) 10 Other Projects in Louisville and Jefferson County Area	12,461,088.43	4,900,791.20
II. (1) University of Kentucky Medical Center, Lexington	23,765,042.00	(8,628,621.00)* 3,431,775.00**
(2) 2 Other Projects in Lexington Area	6,581,522.90	3,052,500.00
III. 7 Projects in Covington and Newport Area	7,433,676.44	3,071,704.40
IV. 4 Projects in Owensboro Area	3,006,658.44	1,251,366.93
V. 1 Project in Paducah Area	919,576.80	510,324.32
VI. 4 Projects in Ashland Area	2,938,628.79	1,609,551.04
VII. 47 Projects throughout the rest of the State	24,466,050.82	12,407,730.92
VIII. 50 Health Centers completed, under construction or in final drawings	3,282,898.74	1,891,225.60
TOTALS	$101,549,514.47	$39,671,377.95

*Total to be made available during next three fiscal years.
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Wide-Spectrum Action. Secondary bacterial infections, which are always a threat in upper respiratory involvement, are forestalled by the wide-spectrum effectiveness of triple sulfonamides. This added antibacterial protection makes Trisulfaminic highly useful in treating the debilitated patient who is prone to lingering or frequently recurring colds.

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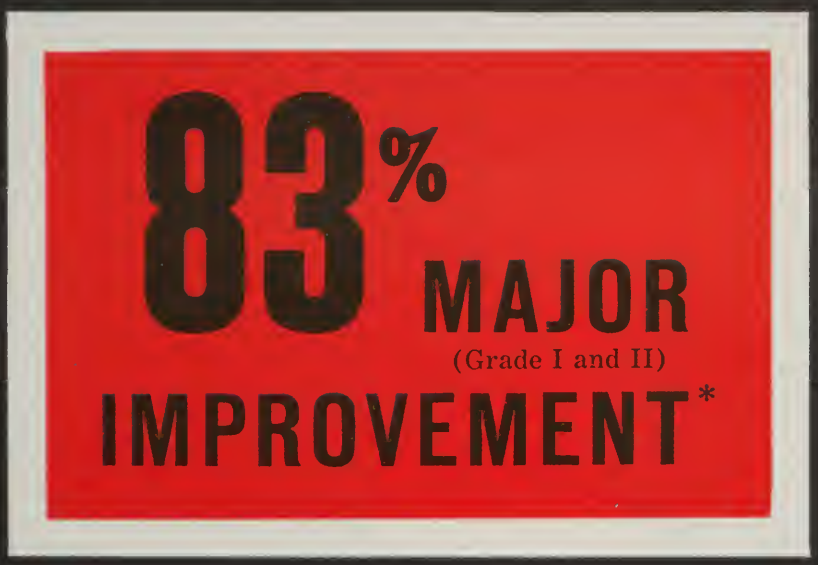
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Each Tablet and each 5 ml. teaspoonful of Suspension contains:

Triaminic®	25 mg.
(phenylpropanolamine HCl	12.5 mg.;
pheniramine maleate	6.25 mg.;
pyrilamine maleate	6.25 mg.)
Trisulfapyrimidines U.S.P.	0.5 Gm.

Dosage: Adults—2 to 4 tablets or teaspoonfuls initially, followed by 2 tablets or teaspoonfuls every 4 to 6 hours until the patient has been afebrile for 3 days. Children 8 to 12 years—2 tablets or teaspoonfuls initially, followed by 1 tablet or teaspoonful every 6 hours. Younger children—dosage in proportion.

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1. Treatment discontinued too soon (percentage of patients improved increases substantially after first six months).
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Plaquenil sulfate is supplied in tablets of 200 mg., bottles of 100.

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(black and white)
250 mg., 125 mg.
(for pediatric or long-term therapy)

ORAL SUSPENSION
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glucosamine-potentiated tetracycline with nystatin

Antibacterial plus added protection against monilial super-infection

CAPSULES (black and pink) 250 mg. Cosa-Tetracyn (with 250,000 u. nystatin)

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For relief of symptoms and malaise of the common cold and prevention of secondary complications

CAPSULES (black and orange)—each capsule contains: Cosa-Tetracyn 125 mg.; phenacetin 120 mg.; caffeine 30 mg.; salicylamide 150 mg.; buclizine HCl 15 mg.

REFERENCES: 1. Carlozzi, M.: Antibiotic Med. & Clin. Therapy 5:146 (Feb.) 1958. 2. Welch, H.; Wright, W. W., and Staffa, A. W.: Antibiotic Med. & Clin. Therapy 5:52 (Jan.) 1958. 3. Marlow, A. A., and Bartlett, G. R.: Glucosamine and leukemia, Proc. Soc. Exp. Biol. & Med. 84:41, 1953. 4. Shalowitz, M.: Clin. Rev. 1:25 (April) 1958. 5. Nathan, L. A.: Arch. Pediat. 75:251 (June) 1958. 6. Cornbleet, T.; Chesrow, E., and Barsky, S.: Antibiotic Med. & Clin. Therapy 5:328 (May) 1958. 7. Stone, M. L.; Sedlis, A., Bamford, J., and Bradley, W.: Antibiotic Med. & Clin. Therapy 5:322 (May) 1958. 8. Harris, H.: Clin. Rev. 1:15 (July) 1958.

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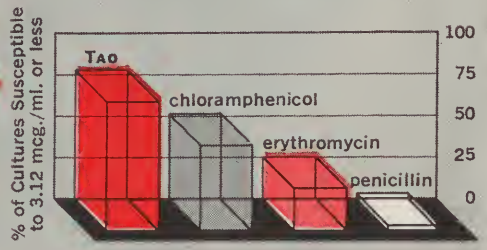
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CLINICAL RESULTS	adults	children	all Staph infections
Cured	172 (80%)	148 (89%)	71 (88%)
Improved	28 (13%)	8 (5%)	7 (9%)
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Types of infecting organisms: The majority of identified etiologic microorganisms were Staph. aureus and Staph. albus. Tao has its greatest usefulness against organisms such as: staphylococci (including strains resistant to other antibiotics), streptococci (beta-hemolytic strains, alpha-hemolytic strains and enterococci), pneumococci, gonococci, Hemophilus influenzae.

even against resistant staph[1,2] . . .

Per cent of "antibiotic-resistant" epidemic staphylococci cultures susceptible to Tao, erythromycin, penicillin and chloramphenicol.[1]



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REACTIONS:

(a) adults	(b) children
Total—9.2% (20 out of 217)	Total—0.6% (1 out of 167)
Skin rash—1.4% (3 out of 217)	Skin rash—none
Gastrointestinal—7.8% (17 out of 217)	Gastrointestinal—0.6% (1 out of 167)

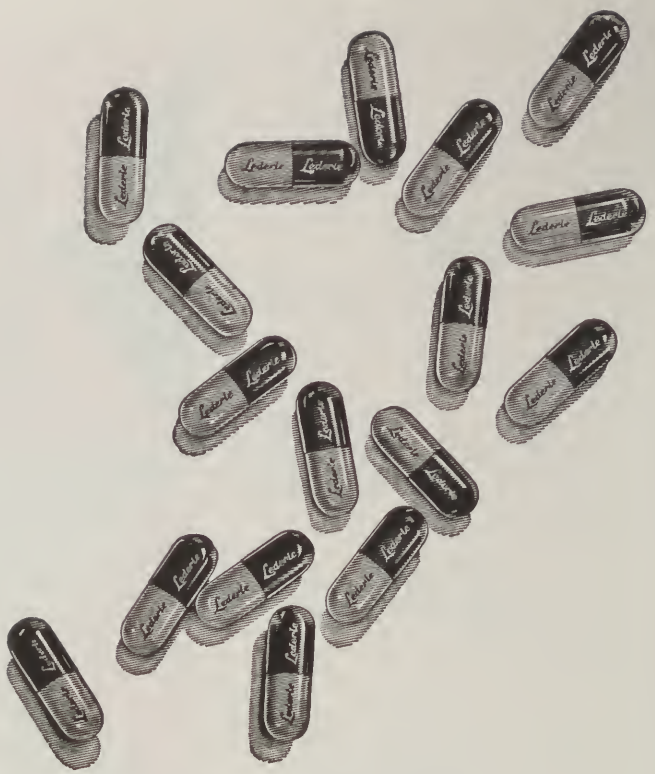
There was complete freedom from adverse reactions in 94.5% of all patients. Side effects in the other 5.5% were usually mild and seldom required discontinuance of therapy.

plus . . . stability in gastric acid • rapid, high and sustained blood levels • high urinary concentrations • outstanding palatability in a liquid preparation

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References: 1. English, A. R., and Fink, F. C.: Antibiotics & Chemother. (Aug.) 1958. 2. English, A. R., and McBride, T. J.: Antibiotics & Chemother. (Aug.) 1958. 3. Wennersten, J. R.: Antibiotic Med. & Clin. Therapy (Aug.) 1958. 4. Celmer, W. D., et al.: Antibiotics Annual 1957-1958, New York. Medical Encyclopedia, Inc., 1958, p. 476.



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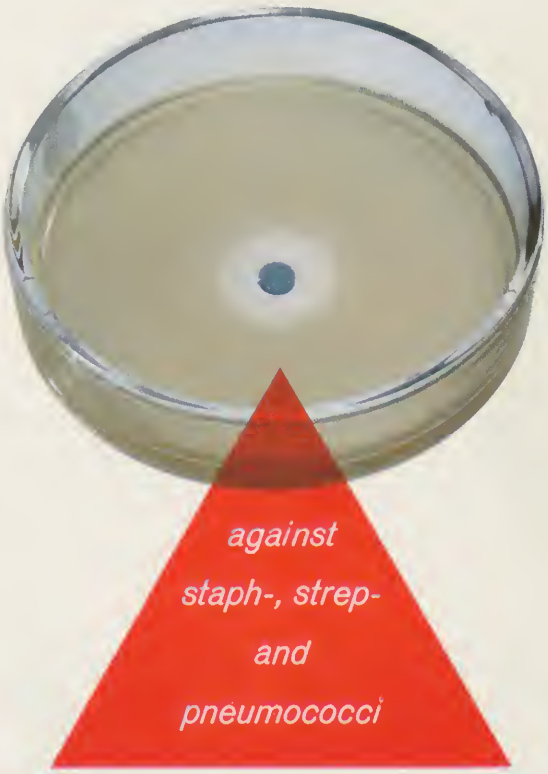
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indications:

In infections caused by staphylococci, streptococci (including enterococci) and pneumococci. Also, against organisms that have become resistant to other antibiotics. ERYTHROCIN should be used where patients are allergic to penicillin or other antibacterials.

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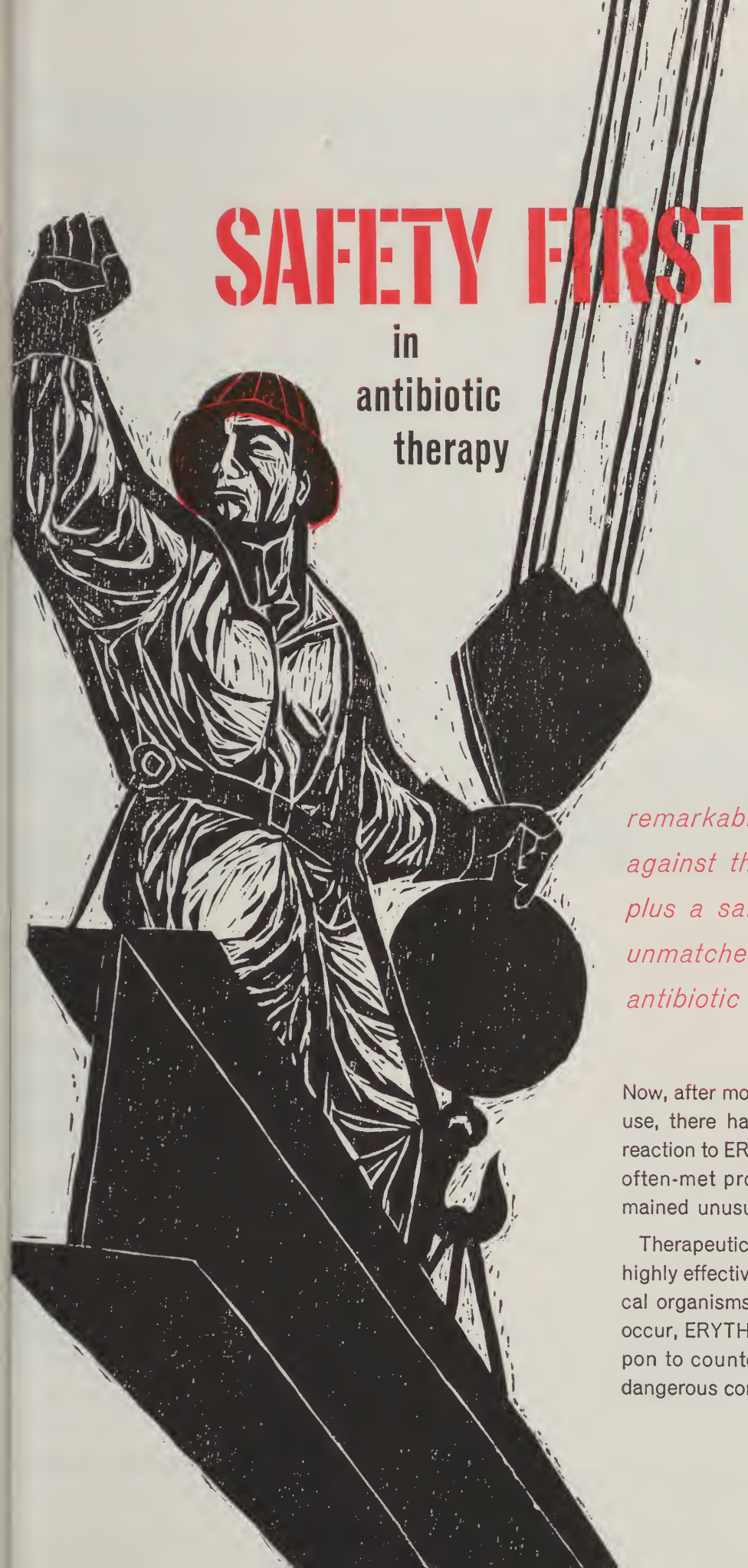
Usual adult dose is 250 mg. every six hours; for severe infections, usual dose is 500 mg. every six hours. Child's dose may be reduced in proportion to body weight.

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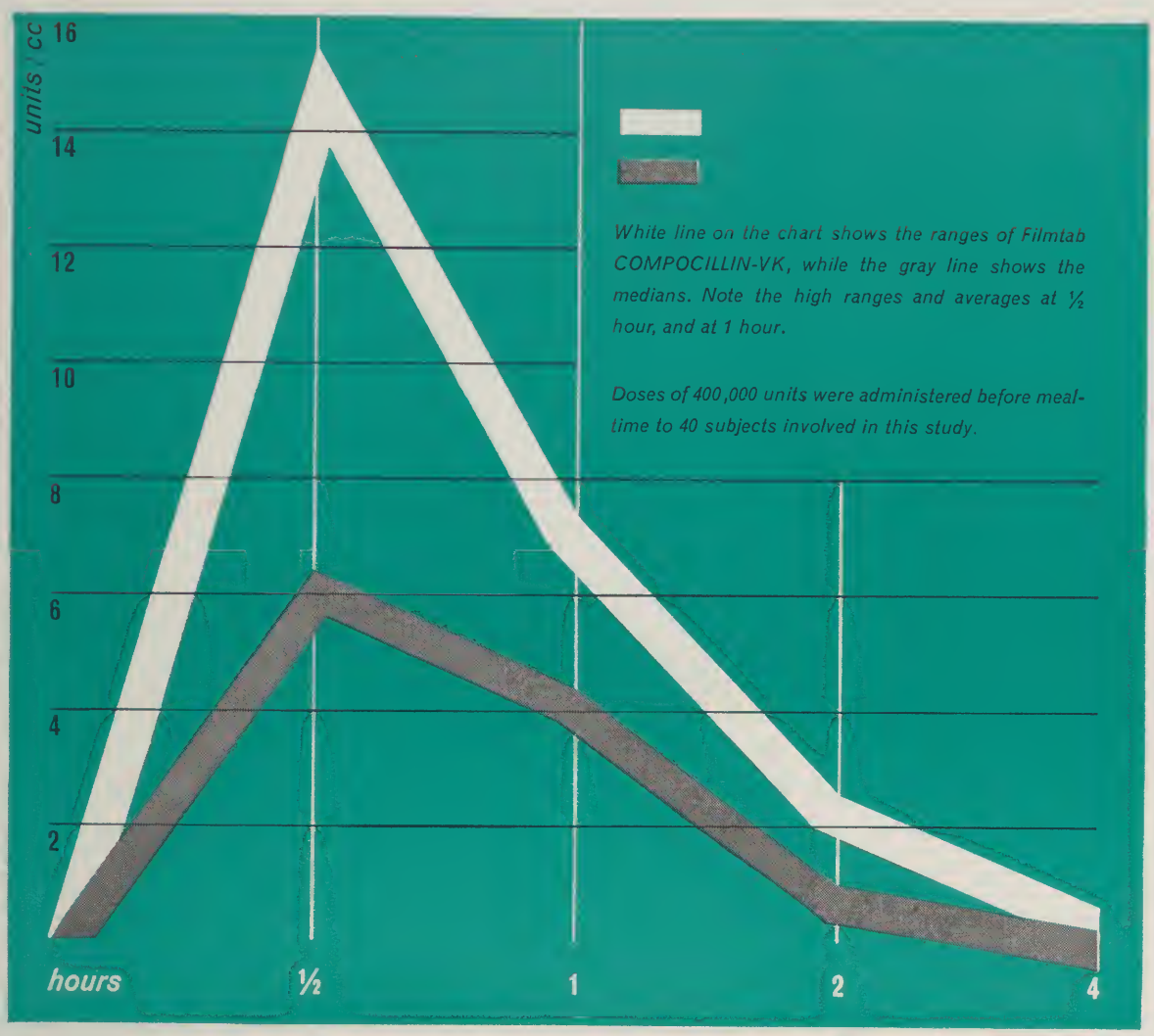


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Supplied:

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, after just 12 months, SPONTIN has become an outstand-
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x papers presented at the Antibiotics Symposium[1] re-
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carditis, staphylococcal pneumonias and staphylococcal
eremias. Many of these patients were going downhill
dily—in spite of treatment by other antibiotics.

xicity? Careful attention to dosage recommendations has
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ICATIONS: Against a wide range of staphylococcal,
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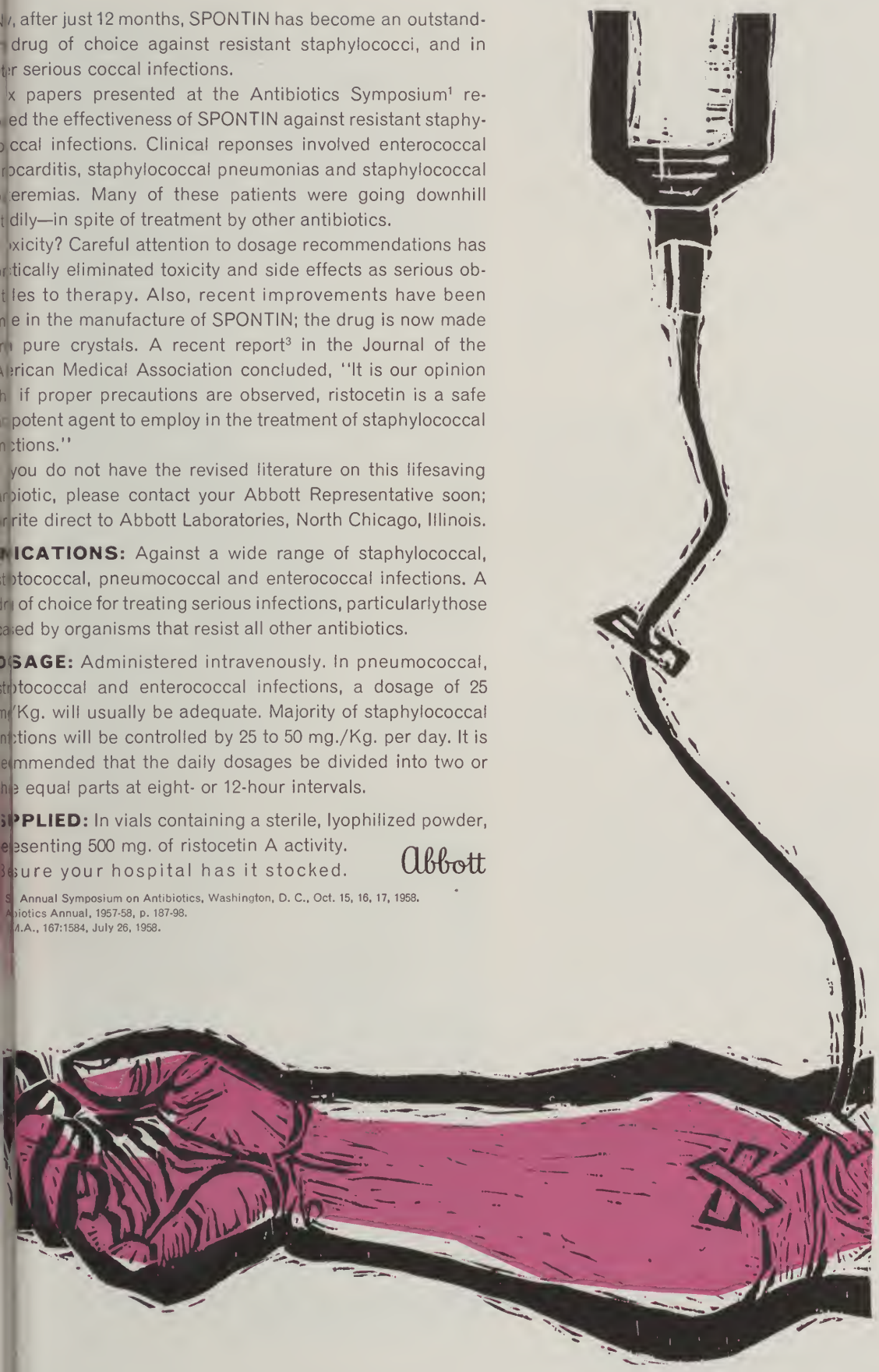
SAGE: Administered intravenously. In pneumococcal,
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/Kg. will usually be adequate. Majority of staphylococcal
tions will be controlled by 25 to 50 mg./Kg. per day. It is
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PPLIED: In vials containing a sterile, lyophilized powder,
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Annual Symposium on Antibiotics, Washington, D. C., Oct. 15, 16, 17, 1958.
biotics Annual, 1957-58, p. 187-98.
M.A., 167:1584, July 26, 1958.



From the Files of the

Committee for the Study of Maternal Mortality

Case No. 30: This patient was a 29-year-old married white gravida 5, para 4, private patient. She was seen initially in her first month of pregnancy and treated for nausea. Her L M P was February 15, 1957 and by menses was due November 22, 1957.

Past History: Her first child was an 11-pound stillborn, the subsequent three children were all delivered normally. She was RH-/ and the VDRL reactive.

(*See prenatal data chart below.*)

The patient had several colds during pregnancy and received penicillin on several occasions for them. Her last cold was two weeks before delivery. Her chest was described as negative, at that time, when she was flouroscoped.

The patient had extremely painful false contractions one week prior to delivery. They became worse November 21, 1957, so she was hospitalized and checked by an obstetrical consultant. Vaginal examination revealed the cervix to be 2 centimeters dilated with the presenting part low, so an elective induction was started at 1:30 p.m. with a pitocin infusion. Regular contractions began around 2:00 p.m. At 3:30 p.m. she was examined, found to be 4 cm. dilated, and was sedated with three grains seconal and 100 mg. demerol. At 7 p.m. she had progressed to 6 cm. dilation and the sedation was repeated, 100 mg. demerol and 1/150 gr. scopolamine. She was found to be complete (rim) on examination at 8:50 p.m. when she suddenly became cyanotic below the midline. Immediately, she was moved to the delivery room and oxygen was administered. Forceps were applied to the head on the perineum and a 10-pound stillborn male infant was delivered. The mother expired at the same time. The chest was immediately opened, the heart was still beating, and cardiac massage started, plus administration of adrenalin, but in spite of this therapy, it gradually slowed and stopped in 45 minutes. An autopsy was obtained.

Findings: There was severe bronchiectasis of both lungs with approximately a pint of pus in each lung. The trachea was obstructed and there was possibly early bronchopneumonia of the right lower lobe. The entire tracheobronchial tree was filled with fluid.

Comment: There was some question by the committee as to why an x-ray had not been made of the chest in view of the recurrent upper respiratory infections. Fluoroscopy is of no value in diagnosing lung conditions, except in the hands of an expert fluoroscopist.

It was felt this must be considered an error in judgment by inducing labor in the presence of bronchopneumonia. This could well explain the increased abdominal pain. It isn't unusual, more commonly in children, to operate for an acute surgical abdomen, only to find the pathology in the chest.

Hindsight, of course, benefited the committee, but it felt of necessity this must be considered a direct obstetrical death.

Prenatal Data

Month of Pregnancy

	1	2	3	4	5	6	7	8	9			
Blood pressure				120/80	120/80	120/80	115/80	120/80	1	2 110/80	3 110/80	4
Weight			145	152		160		166			180	
Urine				neg			2+ sugar			neg	neg	

Comments

1. Pt. had cold; fluoroscoped, chest OK, Rx penicillin
2. Vomiting, Rx B_6
3. 2 + sugar; blood sugar 86 mg %
4. X-rayed, transverse
5. X-rayed by consultant, cephalic



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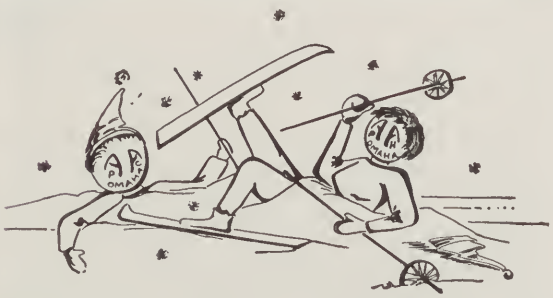
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WASHINGTON NEWS DIGEST

Washington, D. C.—The 86th Congress convenes January 7 with a top-heavy Democratic majority in both House and Senate. This, in turn, will find all Congressional committees, including those dealing in health bills, with a higher proportion of Democrats.

Because legislation rarely gets to the floor for a vote unless some committee sends it there, the make-up of committees is of considerable importance in any Congress. It will be doubly so in the 86th Congress, where so many new personalities and new ideas promise to abound.

In the Senate during the 85th Congress when the line-up was 49 Democrats to 47 Republicans, committees were fairly evenly divided—generally only one more Democrat than Republican. With the ratio in the Senate increased to 62 to 34, committee composition may run as much as 10 to 5 or 9 to 6 in favor of the majority party. The Reorganization Act of 1946 assures each Senator of two committee assignments, which means 26 new places have to be found on Senate committees in January.

The party ratio for House committees likewise will run high in favor of the Democrats.

Each party and each branch of Congress have their own way of naming members to the many committees.

In the Senate, the Democrats make appointments through a standing 15-man group known as the Democratic Steering Committee. Its chairman is Majority Leader Lyndon Johnson and other members are Senators Mansfield, Hennings, Chavez, Ellender, Frear, Russell, Hayden, Holland, Humphrey, Pastore, McClellan, Robertson and Johnston of South Carolina.

The Republicans in the Senate make their appointments through a 5-man Committee on Committees which in the last Congress was made up of Senators Knowland, Bricker, Saltonstall, Bridges and Dirksen.

In the House, the selection of Democratic members is done by the majority members of the Ways and Means Committee which sits as a Committee on Committees. The Republicans have a different approach. When Congress convenes, each state delegation meets and names a representative to a Committee on Committees; he has as many votes on the committee as there are Republicans in his delegation. Chairman of the committee is Minority Leader Joseph Martin.

The House Ways and Means Committee which undoubtedly will be considering legislation of import to physicians (hospitalization of the aged under social security and tax deferrals on money paid into annuities) has for several years been divided 15 Democrats to 10 Republicans. This ratio may change to 17 to 8. In any event, seven members will not serve in the new Congress. One was lost through death, four through decisions not to run for re-election to the House and two to defeat at the polls.

The Senate Finance Committee, which will be handling much the same legislation as Ways and Means, has been divided 8 to 7. It is certain that three Republicans will not serve again; two retired from the Senate and one was defeated in the recent elections.

House Interstate Committee, another group of importance to the profession because of its interest in federal aid to medical schools and Hill-Burton amendments among other things, has lost the three top ranking Republicans and the only physician serving on a committee dealing with health. Either they did not seek re-election or they were defeated at the polls.

Senate Labor Committee, which has jurisdiction over most of the major health proposals in the Senate outside of social security, loses three Republican members. Its present lineup of 8 to 7 will be changed too, probably to 10 to 5.

* * *

Notes

Physician members of the 86th Congress number four. This is one less than in the 85th Congress. Returned again were Drs. Walter Judd of Minnesota and Thomas Morgan and Ivor Fenton, both of Pennsylvania. Defeated were Drs. Will Neal of Virginia and A. L. Miller of Nebraska.

One new doctor has been added. He is Dr. Thomas Dale Alford, a board ophthalmologist of Little Rock, Ark., where he has been in active practice since 1948. Dr. Alford, 42, was educated in Arkansas schools and received his medical degree from the University of Arkansas. He served in the Army Medical Corps during World War II.

Dr. Morgan, who has been acting chairman of the House Foreign Affairs Committee since last summer, is slated to become chairman when the new Congress is formally organized. He will thus be the first physician chairman in the 136 years of the committee.

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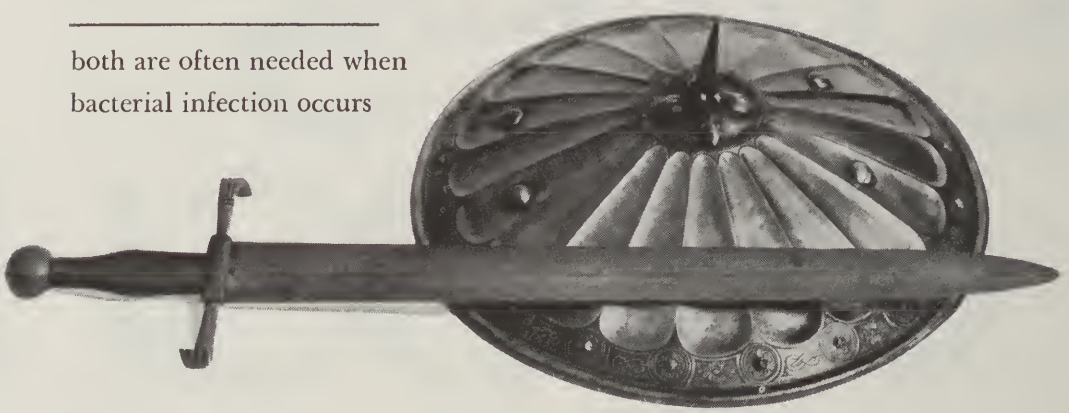
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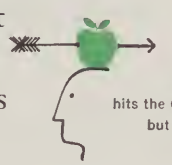
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Source—Lichtenstein, M. E.: GP *16*:114 (Oct.) 1957.

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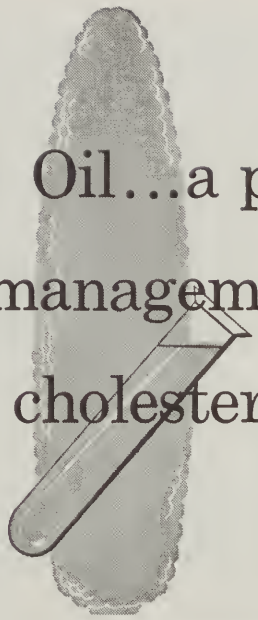
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VOL. 56 DECEMBER, 1958 No. 12

Oxyuris Infestation Of The Appendix Simulating Symptoms Of Appendicitis

MALCOLM L. BARNES, M.D.* and GEORGE PERRINE, M.D.**
Louisville, Ky.

A SURVEY of the literature on oxyuris vermicularis infestation of the appendix reveals that the appendix is infested in from 1 to 11% of surgical specimens when they are prepared by ordinary techniques. When special techniques are used by the pathologist the worms are discovered in as many as 33% of the appendices. Schenken and Moss[1] point out that the parasite is discovered in about 10% of appendices on gross examination. When their centrifuging technique is used they are found in about 23% of appendices and the comparable figure for a centrifuging plus repeated washing technique is 31%. The worms are facile in escaping the confines of the specimen unless fixed early and handled prophylactically.

The worms are more frequently found in the appendices of children. However, this study by no means comprises a pediatric problem; the average age of the patients having an appendiceal infestation is approximately 18 years.

Etiological Role

Some observations concerning the etiological role played by oxyuris infestation in acute appendicitis or, at least, concerning the symptoms of the infestation and their effect on the differential diagnosis of acute appendicitis are appropriate. Still[2] first described oxyurids in the appendix of children and advanced the view that they could cause catarrhal changes in it. Gordon[3] concluded, after a pathological study of a large number of cases, that the parasites do not cause appendicitis. Matsuoka[4] and other authors conclude that oxyuris infestation may produce symptoms resembling chronic and acute appendicitis. Warwick,[5] using a clinicopathological analysis on her cases, seems justified in concluding that the presence and activity of the worm, which acts as a foreign body, might cause painful contractions of the muscular wall of the appendix that might simulate symptoms of appendicitis.

Chipps,[6] analysing the history, clinical and laboratory findings in a group of 40 cases of oxyuris infestation of the appendix, chiefly from children, found that in about 35% of the cases surgery was strongly indicated, in 25% of the cases surgery was probably not indicated, and in about 27% of the cases surgery was probably indicated. In 71% of the cases yielding a non-inflamed appendix containing pin worms there had been signs and symptoms of appendicitis.

Our study is a clinicopathological analysis. It should be pointed out at the outset that we do not feel that our method measures accurately the artistry of clinical diagnosis, but that it will bring the cases under closer scrutiny and point out some facts about the infestation if not about the diagnosis of appendicitis itself.

Fig. 1 illustrates some facts in general concerning the study. In four out of ten cases having a preoperative diagnosis of acute appendi-

Total Cases—	69
Preoperative Diagnosis—Acute Appendicitis	54
Pathological Diagnosis—Acute Appendicitis	33-61%
Pathological Diagnosis—Oxyuris	13-18%
Family History of Parasites in Cases with Infestation	3-25%
Family History in Cases without Infestation	0
Oxyuris Found In:	
Preoperative Diagnosis—Acute Appendicitis	10-18.5%
Incidental Appendix	2
Gangrenous Appendix	1
Operative Diagnosis—Acute Appendicitis	4-40%

Figure 1

*Associate Professor of Pathology—University of Louisville School of Medicine.
**Instructor in Surgery—University of Louisville School of Medicine.

citis but having a pathological diagnosis of oxyuris, the surgeon thought he was dealing with an acutely inflamed appendix at operation. Excerpts from the operative note on four cases in this category read as follows:

1. "Numerous enlarged lymph nodes found in the mesentary of the terminal illeum. 1000 cc of cloudy fluid found and aspirated."

2. "150 cc of cloudy fluid was found in the abdomen. The mesenteric nodes were greatly swollen—some to 1.0 cm. in diameter."

3. "Exudate was seen on the bowel wall. The appendix appeared to be acutely inflamed."

4. "Acutely inflamed appendix." Lymph node biopsy revealed reactive hyperplasia.

Figures 2 and 3 represent graphically the clinical and laboratory findings of cases included in the study. The clinical manifestations included were taken arbitrarily from a standard surgery text. The cases having "normal" pathological examination were used hoping to control the other categories. It may be seen that, while the group of cases having a pathological diagnosis of acute appendicitis had a slightly better established clinical diagnosis, the group of cases having a pathological diagnosis of oxyuris infestation was by no means

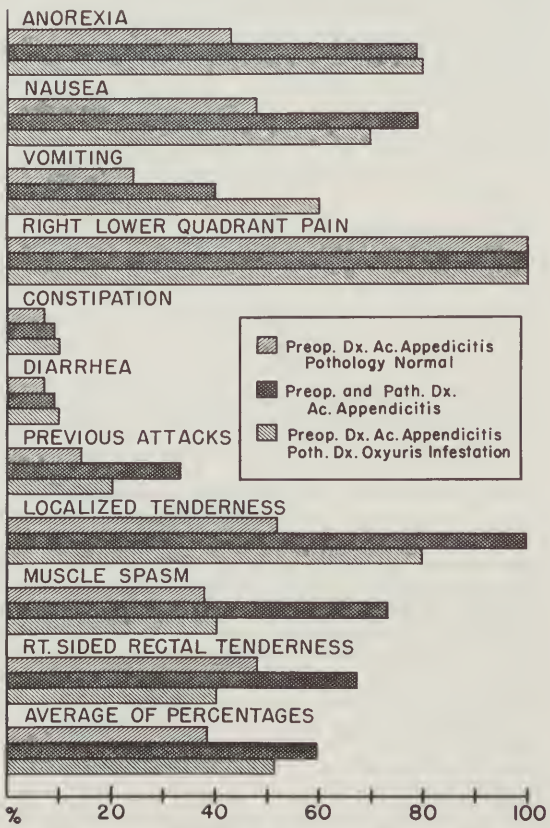


Fig. 2

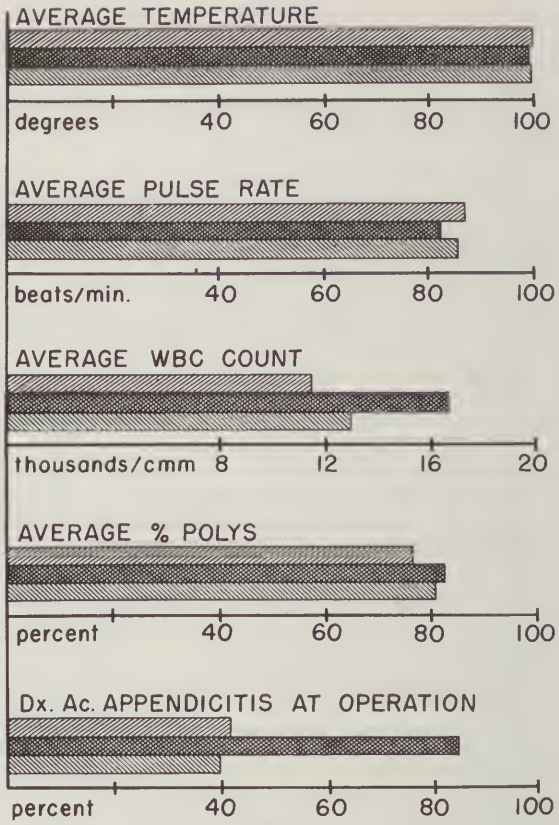


Fig. 3

devoid of findings and this is true to a lesser extent of the group having normal pathology. When worms are present a diagnostic problem arises.

Incidentally, it may be worthwhile to note that in 15% of cases the surgeon did not know he was removing an acutely inflamed appendix; although he operated because he thought he would find one. On the other hand, in approximately 40% of the cases the surgeon thought he was removing an acute appendix, but the pathological examination revealed either oxyuris infestation or no pathology.

In conclusion, we feel that oxyuris infestation of the appendix can cause symptoms of appendicitis perhaps by acting as a foreign body to cause intra-appendiceal tension and muscular spasm. We do not wish to overlook a source of error involving the possibility of some third undetected disease causing symptoms of appendicitis in the cases included in the study but submit that the weight of evidence signifies that when worms are present a diagnostic problem arises, and available methods of diagnosis of oxyuris infestation should be used in perhaps all but the cases having classical manifestations of acute appendicitis.

(Continued on Page 1282)

The Conservative Operation for Endometriosis: A Report of Its Use in 200 Cases*

LAMAN A. GRAY, M.D.**
Louisville, Ky.

IN 1948, I presented a summary of 250 operations for endometriosis, occurring in 853 laparotomies (29.3%).[1] Of those 250 cases, 93 (37.2%) were radical operations and included removal of the uterus and both tubes and ovaries. Among these there were large myomas of the uterus, large endometrial cysts and extensive endometriosis of the pelvic peritoneum and the bowel wall. Unfortunately, one-fifth of these radical operations occurred in women younger than 35 years. In 54 patients (21.6%), a semi-conservative procedure was followed, the uterus was removed necessarily, but a functional ovary was retained. Almost one-third of these cases were under the age of 35 years.

In the remaining 103 patients (41.2%), a strictly conservative operation was performed, excising endometrial implants, cysts, myomas, and correcting malpositions. Subsequent pregnancy occurred in 33.8% of those who were married, during the period of follow-up.

In the succeeding ten years, the percentage and distribution of the operations have been approximately the same in my hands. I wish to add 97 additional cases with conservative surgery, and analyze the total of 200 cases treated in this manner, with particular reference to symptoms, indications, technique and results. This operation is distinctive, rather standardized in technique, and relatively frequently performed over the past twenty years.

A conservative approach to endometriosis includes observation, hormone therapy and conservative surgery.

Observation of Cases with Endometriosis

Observation of cases with early endometriosis is indicated, especially if the symptoms are mild. The early lesions are diagnosed by the palpation of the roughened thickening in one or both uterosacral ligaments, an induration that is almost barbed on its edges, accompanied by exquisite pain on palpation. The small, shotty nodules in the cul-de-sac are more angular than spherical, and are pathognomonic of endometriosis. Induration in the uterosacral ligaments may be caused by pelvic cellulitis, but if the perception of the examiner is accurate, differentiation is usually clear on recto-vaginal examination. While nodules in the cul-de-sac may be due to malignant transplants from the ovary, stomach or bowel, again the distinctive endometriosis usually is not to be mistaken. The associated adherent ovary of normal size, or the adherent ovarian cyst of 4 to 6 cm. in diameter, have their etiology diagnosed by the cul-de-sac and uterosacral lesions. The frequent occurrence of uterine retroversion in early cases of endometriosis (64.5%) adds to the more characteristic syndrome. Of all patients with retroversion, a minority have endometriosis. The status of endometriosis may remain the same for many years, or may progress rather rapidly in one or two years to severe lesions. In many instances, where there is little or no progression, the patient may be observed throughout life.

The early lesions with absent or minimal symptoms, or the more marked endometriosis with nodular thickening across the cul-de-sac and one or both adherent ovaries, with minor or absent symptoms, or with only moderate dysmenorrhea and slight menorrhagia, may be observed. Many patients desire to avoid major surgery, and if assured of benign disease, minimize their discomforts.

There are two main functions of the physician in regard to these cases. The first is to aid and abet pregnancy, when such is desired. The usual procedures are indicated, if a reasonable trial suggests infertility. Many patients with minimal endometriosis become pregnant, including some with an adherent endometrial cyst or marked nodular endometriosis in the cul-de-sac. The fact that 18.3 per cent of married patients in this series have been pregnant previous to surgery, which indicates that pregnancy does occur with endometriosis, without any treatment, does not mean that endometriosis is unimportant as a cause of long-standing steril-

---

*Read before the Kentucky Surgical Society and Virginia Surgical Society, The Greenbrier, White Sulphur Springs, W. Va., April 11-12, 1958.

**From the Department of Obstetrics and Gynecology, University of Louisville Medical School, Louisville, Ky.

ity, especially when there are adherent retroversion and adherent ovaries, or the anterior uterus with bilateral endometrial cysts. The other important function of the physician is the constant search for malignancy. This point must be kept in mind, and surgery must be performed for the mass of truly doubtful etiology.

Hormone Therapy

Hormone therapy for endometriosis has been mentioned frequently, but there are surprisingly few papers in the literature.

Estrogen therapy for endometriosis is in a confusing state, as is evident from a study of the reports, although many gynecologists seem to think that it is efficacious. Perhaps a larger percentage remain doubtful.

In 1948 Karnaky[2] reported 37 cases treated with large doses of stilbestrol: 3 in laparotomy scars, 4 in the posterior vaginal fornix, and 3 diagnosed by biopsy at laparotomy. Apparently cysts and cul-de-sac nodules disappeared, and 5 subsequently became pregnant. Bickers[3] (1949) treated 19 cases, using stilbestrol 5 mgm. daily for 20 days between periods for 3 months. Results were considered excellent, with recurrence in two. The dosage differed greatly from that of Karnaky. In 1951, Siegler and Bisaccio[4] treated 11 patients with Karnaky's method. Five were not improved. Among 6 suspected cases, 2 were improved, and 4 became amenorrhoeic. Hurxthal and Smith[5] (1952) reported 28 cases treated with stilbestrol; some were improved, and some not; the report is difficult to assess. In 1953, Gray and Barnes,[6] reported a single case, carefully studied, treated for 4 months, operated on before and after stilbestrol treatment, and concluded that the patient was not improved. This is the only case reported in detail, with photomicrographs. As in papers and discussions by others, Brewer and Maher[7] (1954) state that the dysmenorrhea with endometriosis may be controlled by 10 to 100 mgm. stilbestrol daily, but do not state the fate of the endometriosis and report no cases. Scott and Wharton[8] (1955) treated four monkeys with endometriosis by means of large doses of stilbestrol, and found no atrophy of the implants, no freeing of adhesions, and the endometriosis appeared quite active. Finally, Cooke,[9] in 1956, defended Karnaky's method, reporting good results in 33 cases, indicating that only actual cysts and some fixation of organs could be palpated after 3 months. The cases are not documented in detail. I must conclude that after ten years the evidence in the literature of the cure of endometriosis by stilbestrol is questionable; furthermore, the theory is illogical.

Androgen therapy, also, is not clearly documented. While it is well known that large doses of testosterone will neutralize estrogens, depress the pituitary, cause cessation of ovarian function and an artificial menopausal state, interest, of late, has focused on the use of small dosages that do not interfere with ovulation and menstruation. In 1950, Creadick[10] stated that 5 of 25 patients with endometriosis became pregnant after taking methyl testosterone 10 mgm. daily for 3 months, and that palpable lesions were improved. In 1953, Preston and Campbell[11] reported 187 cases with clinical endometriosis treated with methyl testosterone, 10 mgm. daily. Of 80 with sterility, 48 became pregnant (60%). This is an enthusiastic and interesting report. The degree of endometriosis is not so clear. In 1956, McCall[12] stated that methyl testosterone, 10 mgm. per day, will aid many patients symptomatically, but very few with extensive lesions will respond favorably. He reported no cases. McPhail[13] (1957) stated that 21 patients, treated with methyl testosterone 5 mgm. daily for 90 days, were improved in 60 per cent; ovulation was not interrupted; 9 of 15 conceived. It is not clear that there was improvement in the pathology. This form of therapy is illogical and has not been supported by histological studies.

Recently, Kistner[14] (1957), believing that pregnancy is very beneficial for endometriosis, produced psuedo-pregnancy in 12 patients, using estrogens and long-acting progestins (Delalutin®), or norethynodrel (Enovid®), a very potent oral progestational compound, which also has some combined estrogen, and which depresses the pituitary gland. After several months of pseudo-pregnancy, he believed nine were improved. This approach is interesting, but obviously much investigation and follow-up are necessary to substantiate the value of the treatment. The softening effect of the decidual change may be purely temporary, as I would suspect from observation of endometriosis in pregnancy.

Conservative Surgery

The effect of conservative surgery for endometriosis has been reported by a number of authors in the past few years. In 1949, Bacon[15] reported 112 conservative operations, and 26.8

per cent of the patients became pregnant. Scott and TeLinde[16] (1950) listed 127 conservative operations among a total of 516 cases, of which 64 were followed, and 40.6 per cent became pregnant. Presumably most or all complained of sterility. Siegler and Bisaccio[4] (1951) gave a summary of 32 conservative operations; 28 per cent became pregnant, which they thought was no better than palliative therapy. Huffman[17] (1951) reported 44 conservative operations, of which 47 per cent became pregnant. Meigs[18] (1953) reported 37 operations by the conservative method, and 12 (32.4 per cent) became pregnant. Mackay,[19] in 1954, from Australia, reported 45 cases, and 23 became pregnant. Whitehouse and Bates[20] (1955), from England, reported 35 patients, of which 16 (45.7 per cent) became pregnant. In 1955, Norwood[21] described 54 selected patients, with 51 (94.4 per cent) pregnancies after surgery. Depp and Pope[22] (1956) reported 233 operations from endometriosis, of which 85 were conservative operations in patients with sterility, and 70.5 per cent of the latter became pregnant. Finally, Malone[23] (1956) reported conservative operations in some 40 cases, of which 40 per cent became pregnant. Of 37 treated without surgery (presumably with androgens), 32 per cent became pregnant. He believed that surgery was not superior to medical therapy, to any marked degree.

As reported in this paper, and mentioned in many others, sterility is not the only reason for surgery in endometriosis, as the majority of patients have other major complaints. But fertility is a good measure of its success.

Report of Cases

In my practice in the past 20 years, I have performed 200 conservative surgical operations for endometriosis (Table I). Ten have been

TABLE I

Conservative Operation in 200 Cases

Ages:				
18-20	21-25	26-30	31-35	36-40
10	67	76	37	10

Previously delivered	28	(18.6%)
Dysmenorrhea	173	(86.5%)
Meno-metrorrhagia	73	(36.5%)
Myomas	31	(15.5%)
Retroversion	129	(64.5%)
Unmarried	47	(23.6%)
Subsequent first pregnancy	57 (of 153)	(37.2%)

between 18 and 20 years, 67 between 21 and 25 years, 76 between 26 and 30 years, 37 between 31 and 35 years, and 10 between 36 and 40 years of age. While formerly I thought of endometriosis as occurring after the age of 35, in this conservative group 76.5 per cent were under 30 years. Twenty-eight (18.3 per cent of those married) had had children previously.

Dysmenorrhea was a prominent complaint (86.5 per cent). Menometrorrhagia occurred in 36.5 per cent. Myomas were found in 15.5 per cent. Retroversion was present in 129 (64.5 per cent). Forty-seven were unmarried (23.5 per cent).

Semen analysis was insisted upon for each couple complaining of sterility, because a low count or absent spermatozoa may make pathology endurable, and because the conservative nature of the operation may be affected occasionally if pregnancy is impossible.

A more detailed classification of the last 97 cases, occurring in the past 10 years, demonstrates the order of complaints (Table II). The

TABLE II

Presenting Symptoms in 97 Cases in Last 10 Years

	Dysmenorrhea	Sterility	Pelvic Pain	Meno-Metro.	Dyspareunia
Main Complaint	46	28	15	4	0
Second complaint	27	12	10	16	16
Third complaint	5	5	4	7	11
Fourth complaint	0	4	3	2	0
	78	49 (25 preg.)	32	29	27

first complaints were dysmenorrhea in 46 cases, sterility in 28, pelvic pain (intermenstrual) in 15, and meno-metrorrhagia in 4 cases. The second complaint, in order of importance to the patient, was dysmenorrhea in 27, sterility in 12, pelvic pain in 10, meno-metrorrhagia in 16, and dyspareunia in 16 cases. Dyspareunia was not the first complaint of any in this series. The third complaint was dyspareunia in 11 cases, dysmenorrhea in 5, sterility in 5, and meno-metrorrhagia in 7 cases. The fourth complaint was sterility in 4 cases, pelvic pain in 3, and meno-metrorrhagia in 2 cases. It is interesting that severe menstrual pain superseded sterility as a reason (in 80.2 per cent) for consulting the gynecologist. Sterility was a definite complaint in 50.5 per cent, though of first importance to these patients in only 28.8 per cent.

Further evaluation of the last 97 cases, occurring in the past 10 years, shows that a preoperative diagnosis of endometriosis was made in 81 (83.4 per cent), while 7 were thought to have ovarian cysts of undetermined etiology,

5 had retroversion without palpable thickening, and 4 were thought to have chronic salpingitis. The pathologist reported definite endometriosis in 80 of the 97 cases (82.4 per cent), could not find definite endometriosis in 5 cases, and in 12 cases material was not submitted, as the implants were removed by the electric loop, using cutting current. Follow-up of 94 of these 97 patients, up to ten years, revealed no palpable residual endometriosis in 56 cases, slight endometriosis in 19, moderate endometriosis in 11, and marked endometriosis in 8. Four of the latter have had subsequent radical surgery.

It appears that the pre-operative diagnosis should be accurate in the great majority of cases. The pathological diagnosis should be made in most cases if the surgeon takes implants as separate specimens, or indicates to the pathologist areas for section. Implants on excised specimens are readily overlooked, and chocolate cysts may require a number of blocks and sections before the true nature is obvious. The co-operating surgeon and interested pathologist may increase greatly the frequency of diagnosis of this disease.

The Conservative Operative Procedures

The operative procedure, when indicated, was a rather standard one. The Papanicolaou smear, or biopsy, was taken, except in the very young, before major surgery for clearance. The cervix was dilated, to promote good drainage, the endometrium was curetted away, always with meno-metrorrhagia, and preferably in all cases, for thorough knowledge of the patient. This was a routine procedure in the 200 conservative operations. The abdominal incision was in the midline, because it could be extended, if necessary, for presacral neurectomy, and because the suspension procedure seemed better with this approach. In 64.5 per cent of cases the uterus was retroverted, usually adherent to the rectum. Endometrial implants, with their surrounding scar tissue, were found most frequently in one or both uterosacral ligaments, in the cul-de-sac, and often involving the wall of the rectosigmoid. Isolated areas in the free loop of the sigmoid were not infrequent, at times forming retracted, indurated nodules, pressing into the lumen. One or both ovaries were involved in the majority with either small implants or endometrial cysts. One ovary was destroyed and required removal (in 63 of the 200 cases). In 59 cases one ovary was partially resected. In 17 others, both ovaries were resected of endometrial cysts. From the pelvic peritoneum and bowel wall endometrial implants were excised in 122 cases (61 per cent). In the majority of instances the excision was by sharp dissection, usually with Metzenbaum scissors, in a smaller percentage by means of the electric loop. With the cutting current, small implants from the surface of the ovary and posterior wall of the cervix were removed. Excision over the ureters, uterine vessels, and bowel wall, was performed better by sharp dissection. (Fig. 1 and 2).

In excising endometrial implants on the bowel wall, great care was taken not to enter the lumen. But when quite necessary, the excision was extended into the lumen. A thoroughly empty bowel is most advantageous. Preoperative bowel preparation was greatly to be preferred, and should have been used more frequently, especially when nodules were felt in the rectal wall, or when there were symptoms of diarrhea, constipation or partial obstruction, associated with the menses. In one patient, a generous portion of the rectosigmoid was excised without incident. Every effort was made to excise all the endometriosis, within reason. Gentleness and peritonization are important. Great care was taken not to injure the ureters. Rarely the ureteral wall may be involved in endometriosis, and may require resection and anastamosis, but such was not found in these cases.

TABLE III

Surgical Procedures in 200 Cases

Dilatation and curettage	200
Unilateral oophorectomy	63
Resect. one ovary	59
Resect. both ovaries	17
Exc. implants	122
Resect. rectal mucosa	1
Suspension uterus	178
Presacral neurectomy	44
Myomectomy	31

Presacral neurectomy was performed in 44 cases (22 per cent), those having the more severe dysmenorrhea. If essentially all of the endometriosis was excised, dysmenorrhea caused by the endometriosis should have been alleviated. Perhaps the incidence of dysmenorrhea (86.5%) was so high because of the youth of the patients. Thirty-eight and five-tenths per cent were under the age of 25 years, the time of functional dysmenorrhea. It is difficult to assess the value of the presacral sympathectomy, as almost all the patients experienced

much relief after surgery. Recently, transection of the uterosacral ligaments and resuture into the back of the cervix has been used in six cases (Fig. 2), with apparently good results. Doyle suggested this method, believing most of the pain fibers travel through these ligaments. Its final value has not been assessed.

Myomas were excised in 31 cases. Modified Gilliam suspension of the uterus was performed in 178 of the 200 cases. In this series 129 (64.5 per cent) of the total had retroversion. If not retroverted, after removal of a cyst, the uterus often tended to retroversion, or may have become retroverted by adhesions and recurrent endometriosis at a later date.

Results

There were no deaths, and no obstructions. One developed a large encapsulated pelvic hematoma, requiring drainage by abdominal incision. Others have developed small hematomas which have absorbed. One developed a large hematoma in the incision.

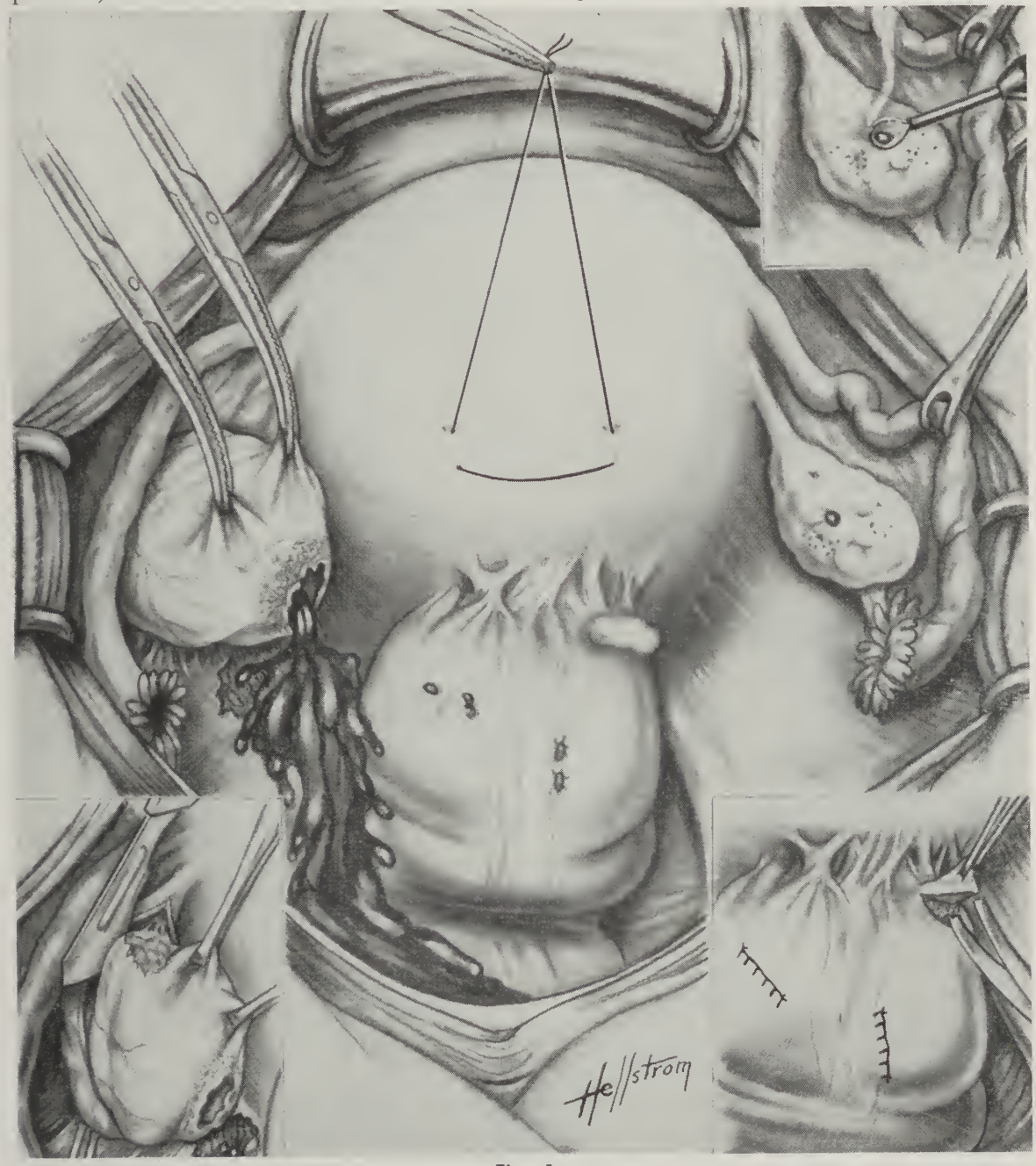


Fig. 1

Endometrial cyst left ovary. Implants right ovary, sigmoid, and cul-de-sac. Adherent retroversion. Left lower insert shows enucleation of chocolate cyst. Right upper insert shows removal superficial implants with electric loop. Right lower insert shows excision of implants sigmoid and cul-de-sac.

Subsequently, 57 of the 200 patients became pregnant. Forty-seven of the total were unmarried. Fifty-seven of 153 married women (37.2 per cent) became pregnant. Twenty-eight married women (18.3 per cent) had previously had children, and sterility was not their problem. Of 49 of the last 97 patients (treated in the past 10 years) who complained of sterility, 25 (51 per cent) became pregnant. These are minimum figures. Many patients were followed only a short time, and a surprising number of these young people have migrated to distant places. Thirteen per cent of those who had complained of sterility changed their minds, or became divorced.

Six of the 200 patients have had secondary radical operations by us, probably some others have had them elsewhere, and a few now need radical surgery for severe recurrent endometriosis. But, the majority are comfortable, and have minimum pathology. For them, this operation has largely relieved their dysmenorrhea, menorrhagia, pelvic pain, dyspareunia, and, not infrequently, long-standing sterility.



Fig. 2

Endometriosis excised. Uterosacral ligaments transected and attached to back of cervix. Modified Gilliam suspension uterus.

It is of interest that 28 patients (18.3 per cent of those married) had previously delivered children, often at 18 or 20 years of age. The disease was not prevented by the pregnancy, and was not cured by the pregnancy. In 5 cases of the last 97 in this group, we have palpated residual endometriosis in the cul-de-sac and uterosacral ligaments before pregnancy, and the same endometriosis was palpated after the pregnancy. In two, the nodules progressed during or after the pregnancies. It seems doubtful that endometriosis is prevented or cured by this physiologic hyperhormonal state.

Discussion

These results confirm the impression that the conservative operation for endometriosis, when it may possibly be performed, and when it is strictly indicated because of disabling symptoms or sterility which does not respond to usual conservative procedures for the latter, is a satisfactory and proper therapy. Pain-relieving drugs, observation, and understanding by the patient are followed in some by desired pregnancies, without surgery. Or the symptoms may not be sufficiently disabling to require surgery. The operation should not be performed until the patient has been observed, and surgery seems clearly necessary. I would hazard a guess that for every patient operated on, in this series, 8 or 10 remain under observation.

While some authors have indicated that radical surgery should never be performed for endometriosis, I do not see how patients with severe endometriosis, with accompanying large myomas (in 54 per cent of cases in this category), with large chocolate cysts and extensive bowel involvement, could be treated with other than radical surgery. Only 41 per cent of cases with endometriosis operated by me fall in the strictly conservative group. It is important to note that sizable chocolate cysts were shelled out in some seemingly hopeless situations, leaving a small portion of ovary from which pregnancies have followed, despite many areas of remaining endometrial implants. Just because all the implants could not be removed did not mean that the patient might not be greatly relieved of her symptoms, and subsequently become pregnant. The realization and necessity of a second laparotomy later should not be considered a failure of treatment if normal health has intervened for a number of years, or if pregnancy has occurred.

Summary and Conclusions

1. The conservative operation for endometriosis has been performed in 200 patients. Pregnancy followed in 57 of 153 married women (37.2 per cent). Of 49 patients specifically complaining of sterility, treated in the past 10 years, 51.0 per cent became pregnant. The relief of dysmenorrhea, pelvic pain, dyspareunia and meno-metrorrhagia was gratifying. Six patients have had subsequent radical surgery.

2. The chief complaints were dysmenorrhea (86.5 per cent), sterility (50.5 per cent), intermenstrual pelvic pain (33.0 per cent), menometrorrhagia (32.5 per cent), and dyspareunia (25.5 per cent).

3. Observation is indicated if the diagnosis is clear, the symptoms not disabling, and if sterility is not prominent. For the treatment of sterility, routine investigations and treatment are indicated for a reasonable period, if pain is not a severe symptom.

4. The conservative operation for endometriosis is a distinct one in gynecology, including dilatation and curettage, excision of endometrial implants, resection of endometrial cysts and suspension of the uterus. Interruption of pain pathways may be indicated. This operation requires care, tedious dissection, and often, more time than hysterectomy. The results, as a rule, are satisfactory.

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Diagnosis of Amyloidosis by Renal Biopsy

WILL W. WARD, JR. M.D.*
Ann Arbor, Mich.

POPULARIZATION of percutaneous needle biopsy of the kidney by Kark and colleagues[1] has established this procedure as a safe and useful tool in the diagnosis of systemic disease affecting the kidneys. Systemic amyloidosis has long been divided arbitrarily into "primary" and "secondary" categories, largely on the basis of the presence or absence of any predisposing disease. A presumptive diagnosis of amyloidosis may be based on an increase in Congo red dye absorption although definitive diagnosis can be established only histopathologically. Primary amyloidosis is said to involve the kidneys in about 35% of cases,[2] while a 70% incidence of renal failure is reported in patients dying with secondary amyloidosis.[3]

Histologic examination of renal tissue would then seem a logical approach to establishing the diagnosis of suspected amyloidosis, especially in the presence of abnormal urinary findings. This is particularly true when the nephrotic syndrome exists as a result of renal amyloidosis, since in this case both tubular and extensive glomerular involvement are said to be present.[4] Both renal insufficiency and hypertension are frequently seen with secondary amyloidosis, and even proteinuria alone should suggest this diagnosis when there is concurrent evidence of predisposing disease.[5] Serial kidney biopsies have been used to study a patient with the nephrotic syndrome due to primary renal amyloidosis in order to correlate laboratory data and the clinical course with the histologic changes.[6]

Case Reports

Brief descriptions follow of a case of primary amyloidosis and three cases of secondary amyloidosis in which the diagnosis was established by renal biopsy.

Case 1. A 45-yr.-old housewife was admitted to the University Hospital on July 22, 1957 with the complaint of "swelling of the feet." She had been entirely well until the edema appeared in April 1957. The review of systems was non contributory. Hospitalization elsewhere for three weeks during June 1957 had been without benefit.

The initial physical examination revealed a well developed, obese 45-yr.-old white female in no distress. Vital signs were normal. The tongue was normal in appearance. Scattered waxy exudates were noted on fundiscopic examination. Signs of pleural effusion were present at the right base. The heart was normal. Minimal ascites was present. Extensive edema of the feet, legs, thighs, sacrum, and abdominal wall was present. Neurological examination was not remarkable.

Laboratory studies revealed a hemoglobin of 17.5 gm. per 100ml, hematocrit of 58 vol%, and corrected erythrocyte sedimentation rate of 8 mm per hr. (Wintrobe). The specific gravity of the urine was 1.017 and there was 4+ albuminuria. Three to four red blood cells, four to five white blood cells, and eight to ten waxy and finely granular casts per high power field were seen. The total serum protein was 4.0 gm per 100 ml with 1.8 gm albumin and 2.2 gm globulin. Total cholesterol was 700 mgm and non protein nitrogen 37 mgm per 100 ml. Serum electrolytes were normal. No L E cells were found. Total urinary protein excretion was 13.5 gm per 24 hr. Electrophoresis of serum proteins revealed a marked decrease in albumin and increase in $alpha_2$ globulin. Bromsulfalein retention was 31% at 45 min. and the alkaline phosphatase was 22 King Armstrong units. Other liver function tests were normal as were the serum calcium and phosphorus. Arm to tongue circulation time was 15 sec. (Decholin). X-rays of the chest showed a small right pleural effusion while those of the upper gastrointestinal tract, gall bladder and colon, and the excretory pyelograms were normal. The electrocardiogram suggested myocardial changes.

Renal biopsy was performed on July 28, 1958. There was hyalinization of glomeruli and some peri-glomerular fibrosis. Congo red and methyl violet stains showed metachromatic substance within the glomeruli thus confirming

*From the Department of Internal Medicine, University of Michigan and University Hospital and Veterans' Administration Hospital, Ann Arbor Michigan.

the diagnosis of renal amyloidosis.

Case 2. A 39-yr.-old white male entered the Ann Arbor Veterans Administration Hospital on December 5, 1956 for evaluation of bronchiectasis which had been discovered on bronchograms done in 1945 after a recurrent pneumonia. A chronic, productive cough and repeated respiratory infections had been present since that time. A diagnosis of "nephritis" had been made at another hospital in August 1956. The patient stated that his father and a brother had died with "nephritis."

Examination at the time of admission revealed a well developed and well nourished 39-yr.-old white male in no acute distress and with normal vital signs. Scattered rales and rhonchi were heard throughout both lung fields. There were decreased breath sounds and dullness at the left base. Marked clubbing of the fingers was present. Examination of the heart and the rest of the physical was not remarkable. There was no edema.

Laboratory studies revealed a hemoglobin of 13.5 gm per 100 ml., hematocrit of 42 vol %, and corrected erythrocyte sedimentation rate of 40 mm per hour (Wintrobe). Specific gravity of the urine was 1.010, and there was 4+ albuminuria. Total serum protein was 4.8 gm per 100 ml with 2.1 gm albumin and 2.7 gm globulin. Total serum cholesterol was 497 mgm per 100 ml. VDRL was non reactive. Blood urea nitrogen and fasting blood sugar were normal. Bromsulfalein retention was 4% at 45 min. and the alkaline phosphatase 17 King Armstrong units. The remainder of the liver function tests were normal. Phenosulfonephthalein excretion was 11.5% in 15 min. and creatinine clearance 43.8 liters per 24 hr. There was no growth on culture of the urine. Urine concentration reached a maximum of 1.015 in 18 hr. X-rays of the chest were interpreted as showing pneumonitis and bronchiectasis of the left lower lobe with generalized pulmonary emphysema and bullous emphysema of the right lower lobe. Bronchograms revealed bilateral lower lobe bronchiectasis. The upper gastrointestinal series, cholecystogram, and intravenous pyelograms were all normal.

A renal biopsy was performed on December 31, 1956. Histologic sections showed glomeruli with varying degrees of acellularity, smudgy pink-staining obliteration of tufts, and focal hypertrophy of parietal epithelial cells. There was considerable tubular atrophy and moderate fibrosis of interstitial tissue. Congo red stain showed abundant pink-staining material within glomerular tufts and walls of thickened small arterioles confirming the diagnosis of amyloidosis.

Case 3. A 31-yr.-old paraplegic was admitted to the Ann Arbor Veterans Administration Hospital on August 14, 1957 because of a six-week history of generalized edema. A diagnosis of multiple sclerosis with transverse myelitis at the level of the seventh thoracic vertebra had been made in 1950. There had been persistent pyuria and recurrent renal calculi requiring pyelolithotomy in 1956 and 1957. Osteomyelitis of the left greater trochanter with an overlying decubitus had been present for about one year.

Physical examination on admission revealed a well developed and nourished paraplegic white male with normal vital signs but for an oral temperature of 102 F. There was extensive generalized edema, decubiti over the left hip and sacrum, and a sensory level midway between the xyphoid and umbilicus with flaccid paralysis of the lower extremities. Examination of the heart, lungs, and abdomen revealed no abnormalities.

Laboratory studies showed a hemoglobin of 12.3 gm per 100 ml, hematocrit of 44 vol. %, and white blood cell count of 8600 per cu mm with a normal differential. Specific gravity of the urine was 1.014 with 4+ albumin. Total serum protein was 4.4 gm per 100 ml. with 1.9 gm albumin and 2.5 gm globulin. 24 hr. urinary protein excretion was 12.9 gm. Total cholesterol was 318 mgm per 100 ml. Blood urea nitrogen was 7 mgm per 100 ml. Proteus and E. freundii were cultured from the urine. Creatinine clearance was 12.5 liters per 24 hr. with a serum creatinine of 1.3 mgm per 100 ml. Serum electrolytes were normal and VDRL non reactive. Liver function tests were all normal. Serum calcium was 8.1 mgm and inorganic phosphorus 4.1 mgm per 100 ml. Electrophoresis of the serum proteins revealed a severe hypoalbuminemia and elevated $alpha_2$ globulin. X-rays of the chest and intravenous pyelograms were normal.

A renal biopsy was done on August 29, 1957. There was heavy infiltration of the stroma with chronic inflammatory cells, reduction in number and degeneration of tubules, and de-

creased cellularity of the glomeruli with nodular, smudgy acidophilic thickening of the tufts. Some of the glomeruli resembled acellular, hyaline-like masses. Congo red stain disclosed much salmon-pink material within thickened glomeruli and afferent arterioles, thereby confirming the diagnosis of renal amyloidosis.

Case 4. A 60-yr.-old salesman was admitted to the Ann Arbor Veterans Administration Hospital on February 19, 1958 complaining of "arthritis." He had been well until early 1954 when he first experienced pain and swelling in the feet which soon progressed to involve most of the other peripheral joints. Therapy with salicylates and 15 to 20 mgm of prednisolone was started at this time and continued until the time of admission. A gastric ulcer was found on upper gastrointestinal X-rays in 1955. A marked increase in joint symptoms began in November 1957 and had persisted. Albuminuria was first noted by the patient's family physician in November 1957.

Physical examination at the time of admission revealed a chronically ill 60-yr.-old white male with rheumatoid deformities of the hands, wrists, and elbows. Vital signs were normal. There was a painful and swollen left knee and ankle. Examination of the heart, lungs, and abdomen was not remarkable. A subcutaneous nodule was present over the left elbow, and there was 3+ pitting edema of the lower extremities.

Laboratory results showed a hemoglobin of 13.2 gm per 100 ml., hematocrit of 42.5 vol %, erythrocyte sedimentation rate corrected to 40 mm per hr. (Wintrobe), and white blood cell count of 8000 per cu mm. with a normal differential. The specific gravity of the urine was 1.005 with 4+ albumin. Maximum concentration of the urine was 1.010 at 12 hr. Total serum protein was 4.7 gm per 100 ml. with 2.6 gm albumin and 2.1 gm globulin. 24 hr. urinary protein excretion was 9.4 gm. Blood urea nitrogen was 10 mgm and serum creatinine 1.1 mgm per 100 ml. Total serum cholesterol was 400 mgm per 100 ml. VDRL was non reactive. Creatinine clearance was 112 liters per 24 hr. and phenosulfonephthalein excretion was 21% in 15 min. Electrophoresis of serum proteins showed a low albumin fraction and increase in alpha$_2$ globulin. Serum electrolytes, calcium, and phosphorus were normal. Liver function tests were normal and L E cell preparation negative. The electrocardiogram suggested myocardial changes. X-rays of the hands and knees showed changes typical of advanced rheumatoid arthritis. Chest film and intravenous pyelograms were normal. The upper gastrointestinal series showed only a duodenal diverticulum.

A renal biopsy was performed on March 13, 1958. All glomeruli showed varying degrees of thickening of tufts, consisting of pale pink material. Congo red stain revealed salmon-pink deposits within these thickened loops of glomerular tufts and smaller deposits at the basement membrane of some tubules again confirming the diagnosis of renal amyloidosis.

Summary

Four cases are reported in which the suspected diagnosis of amyloidosis was first established by percutaneous renal biopsy. Renal biopsy would seem to be a useful and rewarding procedure to confirm the diagnosis of amyloidosis particularly in the presence of abnormal urinary findings. There were no complications resulting from renal biopsy in the reported cases.

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Manuscript Memos

Manuscripts should be submitted in duplicate to The Journal of KSMA, an original copy and one carbon, and typed with double spacing. Maximum length of an article should not exceed 4500 words, and the Board of Consultants on Scientific Articles prefers that they be briefer than this when possible.

Footnotes and bibliographies should conform to the style of the Quarterly Cumulative Index Medicus published by the American Medical Association. This requires in the order given: name of author, title of article, name of periodical, with volume, page, month — day of month if weekly — and year. The Journal of the KSMA does not assume responsibility for the accuracy of references used with scientific articles.

All scientific material appearing in The Journal is reviewed by the Board of Consultants on Scientific Articles. If illustrations are submitted with a paper, The Journal will assume the cost for the first three one-column width half tones. The cost of additional illustrations will be borne by the essayist.

Arrangements for reprints of an article should be made directly with the publisher of The Journal, Gibbs-Inman Printing Company, 817 W. Market St., Louisville, Ky.

The By-laws of the Kentucky State Medical Association provide that all scientific discussions and papers read before the KSMA Annual Meeting shall be referred to the KSMA Journal for consideration for publication. The by-laws further state that the editor or the associate editor may accept or reject these papers as it appears advisable and return them to the author if not considered suitable for publication.

Please mail your scientific articles to The Journal of the Kentucky State Medical Association, 1169 Eastern Parkway, Louisville, Kentucky.

Surgical Aspects Of The Appendices Epiploicae

Donald C. Haugh, M.D.
Mayfield, Ky.

PATHOLOGICAL conditions of the epiploic appendages present a clinical picture that is confused with that of other intra-abdominal surgical conditions so frequently that only three of all the reported cases coming to operation were correctly diagnosed prior to laparotomy.

A review of the available literature yields 181 cases, to which three are added and presented as case reports later in this article. There are undoubtedly a large number not reported and it is not unreasonable to assume that nearly every surgeon will encounter a few of these cases during the span of his practice. Fieber and Forman state,[1] "Although it cannot be classified with acute (vermiform) appendicitis as a highly treacherous disease, appendicitis epiploica has been directly responsible for fatalities and has caused severe surgical complications. In this light alone, appendicitis epiploica may well be emphasized in didactic teaching of differential diagnosis in abdominal conditions."

As Coleman[2] points out, "We cannot ignore a condition that will obstruct the bowel, that will simulate so many other intra-abdominal diseases." With these considerations in mind, an analysis of the clinical and pathological features of appendicitis epiploica should be of practical interest.

History

Hunt[3] in his article on this disease, gives a detailed account of the early historical background. He states that Vesalius, in 1543, first described the anatomy of the epiploic appendage. Virchow, among others, found hard oval bodies free in the peritoneal cavity during cadaver dissections, and he was the first to suggest the detachment of atrophied epiploic appendages as the source of these free bodies. Cruveilhier first presented a case of intestinal obstruction in which an epiploic appendage had acted as a band. Riedel, in 1905, described a case in which torsion of an epiploic appendage occurred in a femoral hernial sac.

Anatomy and Physiology

Epiploic appendages are fat-filled pouches of serosa occurring on the colon from the appendix to the upper part of the rectum. The appendages are arranged in rows varying from one to three, in intimate relation to the taeniae coli. Pines et al,[4] from whose study much of the following anatomical data is taken, found that the appendages average 3 cms. in length, but they have been reported up to 15 cms.[2] They first appear in fetal life but do not attain appreciable size until adulthood. The base may be wide or a narrow stalk. The latter situation is believed to predispose to torsion of the pedicle with thrombosis of the vascular supply. The circular artery of the adjacent colon enters the base of the appendage, sending off branches to the enclosed fat. The main artery forms an inverted U in the base of the appendage before entering the bowel wall at the adjacent taenia. Occasionally diverticula are found in the epiploic appendages, and this relationship is believed to be due to the fact that the weak point in the bowel wall, where the artery pierces it, predisposes to diverticulum formation.

The function of the epiploic appendage is not clear. It has been suggested (1) that it has, in a limited way, the bacteriostatic and absorptive powers of the omentum, (2) that it acts as a protective pad for the colon during peristalsis, (3) that it houses the redundant arterial arch during contraction of the bowel and allows the arch to withdraw and flatten out during colonic distention, thereby avoiding vascular compression.

Pathology

The pathological conditions encountered in 184 cases, given in approximate percentages, were as follows: Torsion 35%, thrombosis and infarction 17%, gangrene 20%, acute inflammation and suppuration 10%, chronic inflammation with fibrous tissue replacement, hyalinization etc. 15%, intussusception 1%. Abscess formation and general peritonitis has been reported,[5] as has one case of massive intraperitoneal hemorrhage.[6]

Torsion is considered an important factor in strangulating the blood supply.[1, 7, 8] Numerous theories have been advanced as to the cause of the torsion, but it appears logical that an epiploic appendage, laden with fat and hanging from the taenia by a narrow pedicle,

might easily undergo torsion.

Obesity is believed to be a predisposing factor. In the majority of cases the patient was considerably above the ideal weight or had recently lost weight.

Inflammation without torsion may result from lymph nodes within the appendage, spread from an enclosed diverticulum, or secondary infection from a vermiform appendix or other organs.

Intestinal obstruction may occur from inflammatory adhesive bands forming between an appendage and some other structure, producing angulation of the bowel, or serving as a point about which other loops of bowel may become twisted and strangulated. One such case is reported in detail in this article.

Signs and Symptoms

Unfortunately there are no clear cut signs and symptoms attributable to this disease. They will depend to some extent on the location of the lesion and will vary with the individual case. Acute symptoms were present in 64% of the cases for less than a week but in others the duration of symptoms ranged from one week to eleven months.

The chief complaint is invariably pain. It is usually dull and cramplike, but with sudden torsion of the pedicle, may be severe. The site is usually localized in the right lower quadrant in 67% of the cases, giving rise many times to the preoperative diagnosis of vermiform appendicitis. Occasionally the pain will shift across the lower abdomen and this finding Lynn et al[7] consider very suggestive of epiploic appendicitis. Nausea was noted in 28% and vomiting in 15%. The patient is usually not acutely ill. The temperature is usually not elevated and leukocytosis is absent in most cases.

Di Rienzo and Mosca[9] have listed three roentgenological signs on barium enema examination that are strongly suggestive of epiploic appendicitis: (1) narrowing, complete or partial, around the circumference of the bowel due to edema or cicatrix, (2) image of two funnels with apices end-to-end, (3) coarsened mucosa with accordion-like contractions which are disposed perpendicular to the long axis of the colon.

On examination, tenderness localized over a small area is the most common finding, and rebound tenderness is fairly frequent. Rigidity is rare, although guarding was detected in approximately one third of the cases. A mass, palpable either abdominally or by rectum, was noted in 70 cases.

Epiploic appendages undergoing torsion in a hernial sac will give signs and symptoms of a strangulated hernia. Adhesive bands causing intestinal obstruction will present signs and symptoms of the latter.

Differential Diagnosis

The correct diagnosis is seldom made preoperatively. This is borne out by the fact that of the 184 cases analysed, only three were suspected of being epiploic appendicitis. The most commonly made diagnosis (62% of cases) was vermiform appendicitis. Although there are no outstanding differences, the following outline will show that there are enough slight differences to arouse suspicion of the true state of affairs.

Differential Diagnosis: Vermiform vs. Epiploic Appendicitis

	Vermiform appendicitis	Epiploic appendicitis
Pain	Diffuse at first, after some hours localizing in right lower quadrant.	Usually limited to small area from onset. May shift from one side of abdomen to the other.
Nausea and vomiting	Common	Uncommon
Fever	Low grade fever usually present	Fever not common
Leukocytosis	Common	Uncommon
Constipation	60% of cases	10% of cases
Rigidity	Common	Uncommon

Treatment

The treatment of a diseased epiploic appendage is ligation of the base and excision. If a diverticulum is present, the stump is ligated and inverted with a purse string suture. Strangulated appendices epiploicae in a hernial sac should be excised and the hernia repaired in the usual manner.

Case Reports

Case 1: F. L. V., a white female, age 43, entered the hospital on December 25, 1953, at 7:30 A. M. complaining of nausea, vomiting and generalized cramping abdominal pain which had begun at 3:00 A. M. She had been to a Christmas eve party and attributed her symptoms to something she had eaten at the party. She had had a normal bowel movement at 7:00 P. M. the night before. Her past history was negative except for menopausal symptoms, chiefly tension headaches and anorexia

nervosa.

Physical examination revealed a well developed rather thin female. The ears, nose and throat, heart and lungs appeared normal. Respirations were 20, pulse 80, temperature 98.8, blood pressure 120/76. The abdomen was soft, slightly distended and mildly tender, particularly in the epigastrium. No solid organs or masses were palpable. There was a midline suprapubic scar, the result of a bilateral salpingectomy and appendectomy nine years earlier. Peristalsis was active.

The white cell count was 15,200 with 90% polymorphonuclears. Her red cell count was 4,400,000 and her hemoglobin was 13 grams. Her urine was negative.

A tentative diagnosis of acute gastritis due to dietary indiscretion was made and the patient was given intravenous glucose and electrolytes, and aluminum hydroxide gel by mouth. However, the patient's symptoms had not subsided six hours later and the abdomen had become definitely distended. A vaguely defined mass could be made out in the right lower quadrant. Upright and lateral decubitus x-ray films revealed gas-filled loops of small bowel. A diagnosis of bowel obstruction was made and the patient was prepared for laparotomy.

At operation, two epiploic appendages of the transverse colon were found to be densely adherent to the fundus of the uterus, and several loops of small bowel were incarcerated by this fibrous band. A portion of the ileum was strangulated and showed early gangrenous changes. The adhesions were divided, the nonviable ileum was resected and an end-to-end anastomosis performed. The patient ran a low grade fever for five days postoperatively but was discharged on the thirteenth postoperative day, eating well and with bowels moving normally.

Comment: The symptoms in this case were of course those of bowel obstruction; however, the case does illustrate a serious complication of disease in the epiploic appendage.

Case 2: C. P. R., a white, 32-year-old male, was first seen on June 16, 1957, with the complaint that a few hours previously he had developed a painful spot in the left side of his abdomen over the linea semilunaris about two inches below the level of the umbilicus. The pain was aggravated by coughing or bending in certain directions.

Examination revealed a somewhat obese white male, not apparently acutely ill. The only positive finding was moderate tenderness over a definite point on the left semilunaris two inches below the umbilical level. There was slight rebound tenderness, but no rigidity. A diagnosis of muscle strain was made and local heat and salicylates prescribed. The patient was advised to return in two days if the symptoms persisted. He returned on June 18, 1957, stating that the pain had grown steadily worse. It was particularly severe when he tried to get up from a sitting position. There was no nausea or vomiting and he had had a normal bowel movement the evening before. Examination revealed no change in findings except that the tenderness, both direct and rebound, was markedly increased. Although no bulge or mass was felt, it was thought that a small hernia at the linea semilunaris, containing strangulated omentum, might account for the symptoms. The patient was admitted to the hospital and prepared for laparotomy.

At operation a gangrenous epiploic appendage with a twisted pedicle was found on the sigmoid colon. No diverticula were found. There were a few old adhesions between the sigmoid and lateral abdominal wall. The gangrenous appendage was excised after the base had been ligated, and the wound was closed. The patient's postoperative course was uneventful.

Case 3: P. T., a white 41-year-old male, was seen on December 16, 1957, with complaints of pain in the right lower quadrant of the abdomen for two days. He gave no history of nausea or vomiting. There was no loss of appetite on the first two days of the illness and no constipation or diarrhea. The history by systems was otherwise negative.

Examination revealed a muscular, moderately obese male who did not appear acutely ill. There was marked tenderness over McBurney's point, both direct and rebound. There was no rigidity. The remainder of the physical examination was negative. Urinalysis revealed normal findings and the white cell count was 11,350 with a normal differential count. A diagnosis of acute appendicitis was made and operation performed.

At operation a gangrenous epiploic appendage with a tightly twisted pedicle was found on the cecum. There were two rows of large appendages arranged along the cecum and ascending colon, some of them measuring

8 to 10 cms. in length. The gangrenous epiploic appendage was ligated at its base and excised. The vermiform appendage was also removed and the wound closed. The patient had a normal postoperative recovery.

Summary and Conclusions

One hundred and eighty-one cases of symptomatic conditions of the epiploic appendages have been found in the available literature, to which three are added, making a total of one hundred and eighty-four.

The clinicopathological features have been discussed. The difficulties of diagnosis and the propensity of epiploic appendicitis to imitate other conditions have been emphasized. Epiploic appendicitis can be a serious disease; several deaths and severe complications have occurred. When operation for vermiform appendicitis reveals a normal appendix, evidence of mesenteric lymphadenitis, diverticulitis, or tubo-ovarian pathology is commonly sought for. Epiploic appendicitis is another condition that should be added to the list. The treatment of epiploic appendicitis is surgical excision.

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Simplified Recording of In-Take and Out-Put

H. J. Koek, M.D., and Andrew M. Moore, M.D.

Lexington, Ky.

THE accurate recording of the patient's intake and output is mandatory in many illnesses for the patient's well being and the physician's peace of mind. A feeling of hopelessness and a sense of persecution reaches a high titer when the previous four, eight or twenty-four hour fluid balance, as routinely recorded, is studied. The methods which we have used are those which are generally accepted. All fluid figures were charted twice, that is both in the graphic and in the nurse's notes. These would very often not coincide and in attempting to check possible mistakes or omissions, it was often difficult if not impossible to find the responsible person.

Again, the space allotted for the charting of fluids on the graphic was so small that detailed figures were not possible and on the nurse's notes so diffusely scattered in a seriously ill patient that several pages might need to be reviewed.

In addition, aside from turning back and forth from nurse's notes to graphic, one constantly has to hold the place of the laboratory sheet in order to refer to this data. In the usual arrangement of charts these three sheets, the graphic, the nurse's notes and the laboratory sheet are so well dispersed throughout the chart that considerable dexterity is necessary to obtain any information.

It is felt that the simplified type of chart we have devised will facilitate accurate recording of the data for easy and ready analysis. We believe that this simplified method of recording information will stimulate the nursing personnel's interest and lead to more meticulous care in following the patient. The method permits fluids to be charted in a logical continuous fashion and the amount of fluids given at any time can be absolutely determined. It can be seen in the illustration that there is a place for laboratory data to be recorded as it is done, placing all information in a concise logical fashion. The chart has been in use for several months and has proved to be satisfactory to all the services utilizing it.

It is realized that this idea of simplified recording of data is not unique and although certainly many excellent graphic systems have been worked out, it is our feeling that this one is quite simple and can be readily used by relatively unskilled personnel.

The Sisters of Charity of Nazareth at Saint Joseph Hospital, Lexington, Kentucky, have been most kind and helpful in making these sheets available for the use of all services desiring them. They have been well received by the Staff.

See Chart on Opposite Page ➤

ST. JOSEPH HOSPITAL
Lexington, Kentucky

INTAKE - OUTPUT CHART

NAME John Doe
BED 2-E-12
PHYSICIAN Blank

DATE 24 April 1958

Nurse: Smith

Time	Blood	Intravenous: Colloid	Intravenous: SS	Intravenous: D/W	Sub Cut.	Oral	Urine	Feces	Emesis	Sweat	Drainage	Time
7			~			30				–		7
8			≈				320	% Form		–		8
9			≈			60				–		9
10	~		410							–		10
11	≈					60				–	~	11
12	≈									+	≈	12
1	500			~		60	270			+	≈	1
2				≈						+	≈	2
3				265		30				–	80	3
	500		410	265		240	590			120	80	

LABORATORY

Sp. G. Urine 1.016
Ph Urine 6.6
Serum K 4.2 meg/L
Serum Na 143 meg/L
Serum Cl 99 meg/L
CO_2 comb 61 vol %
Hgb 10.3 gm
Hematocrit 46 mm
C.I. .93
B.U.N. 11.2 mg%
Body Wt. 74 Kg

Total Intake	Total Output
915	790

Nurse: Brown

Time	Blood	Intravenous: Colloid	Intravenous: SS	Intravenous: D/W	Sub Cut.	Oral	Urine	Feces	Emesis	Sweat	Drainage	Time
3				~						–	~	3
4				≈		30				–	≈	4
5				≈						+	≈	5
6				≈		30				+	≈	6
7				≈						+	≈	7
8			~	735		60				+	≈	8
9			≈							+	≈	9
10			≈			30	490			+	≈	10
11			340							–	140	11
			340	735		150	490			240	140	

LABORATORY

Total Intake	Total Output
1225	870

Nurse: Jones

Time	Blood	Intravenous: Colloid	Intravenous: SS	Intravenous: D/W	Sub Cut.	Oral	Urine	Feces	Emesis	Sweat	Drainage	Time
11			~							–	~	11
12			≈							–	≈	12
1			≈							–	≈	1
2			≈							–	≈	2
3			660	~						–	≈	3
4				≈						–	≈	4
5				≈		30				–	≈	5
6				≈		30	400			–	≈	6
7				620						–	140	7
			660	620		60	400			0	120	

LABORATORY

Total Intake	Total Output
1340	520

Total Daily Intake	Total Daily Output
3480	2180

Chart "Sweat" as follows:

No visible sweat (-)
Little on forehead and around mouth (+)
Frank sweat - generalized (++)

Chart "Feces" as follows:

(E %) If enema is given
(% Liq.)
(% Soft)
(% Form)

MR-29

The L. P. Yandell Memorial Meeting of the Kentucky State Medical Association

Roof Garden, Brown Hotel, Louisville, Kentucky, September 22-25, 1958
Digest of Proceedings of the Regular Sessions of the

HOUSE OF DELEGATES

Clyde C. Sparks, M.D., Ashland, Speaker of the House, Presiding

First Session

In the Roof Garden of the Brown Hotel, Louisville, Kentucky, the first session of the House of Delegates of the Kentucky State Medical Association was called to order by the Speaker, Clyde C. Sparks, M.D., Monday, September 22, 1958, at 7:15 P.M. Reverend Robert C. Board, Rector of St. Luke Episcopal Church, was asked to give the invocation, after which Robert A. Orr, M.D., Chairman of the Credentials Committee, reported that a quorum was present. A motion that the digest of proceedings of the 1957 meeting be accepted as published in The Journal of KSMA was made, seconded and carried.

The Secretary was requested by the Speaker to read the names of all Kentucky physicians who had died since the 1957 meeting. These physicians, their location, and date of death are as follows:

Abell, Nathan Douglas, Louisville, June 18, 1958
Acton, J. W., Glasgow, January 25, 1958
Allen, Ellis S., Louisville, January 11, 1958
Armstrong, Charlie J., Louisville, March 9, 1958
Bailey, William Clark, Harlan, November 20, 1957
Bass, W. J., Paducah, April 22, 1958
Berg, Alfred M., Louisville, January 25, 1958
Beutel, G. P. Jr., Louisville, December 18, 1957
Blades, John M., Butler, October 4, 1957
Bond, Ellis M., Raceland, October 3, 1957
Burton, William S., Louisville, August 15, 1958
Caldwell, Ida M., Newport, November 1, 1957
Caldwell, John H., Newport, October 22, 1957
Carr, Gordon B., Sturgis, October 26, 1957
Carter, Herman T., Edmonton, January 4, 1958
Chrisman, J. H., Owenton, December 6, 1957
Claybon, Festus, Madisonville, August 9, 1958
Combs, Carlow B., Hazard, October 21, 1957
Crittenden, J. R., Russellville, September 26, 1957
Crook, James Wiley, London, January 26, 1958
DeWeese, Charles W., Livermore, May 17, 1958
Dotson, Malcolm T., Prestonsburg, September 7, 1957
Dotye, C. B., Lexington, December 15, 1957
Dunlap, Claude M., Lexington, December 2, 1957
Edwards, John E., Lancaster, November 27, 1957
Ezell, James J., Hopkinsville, March 4, 1958
Fitch, E. R., Ashland, June 3, 1958
Frazier, Harry S., Louisville, February 8, 1958
Frehling, Joseph M., Louisville, November 1, 1957
Fugate, Issac T., Louisville, December 4, 1957
Gatz, Robert E., Fern Creek, June 6, 1958
Graham, Charles L., Tollesboro, March 6, 1958
Gunn, William U., Wheelwright, September 16, 1958
Gunn, Milus L., Harlan, April 5, 1958
Hagan, William H., Louisville, November 8, 1957
Haley, Marcus D., Stearns, July 25, 1958
Hyden, Eugene, Paris, October 12, 1957
Jasper, Galen E., Somerset, October 18, 1957
Johnston, Edward E., Elizabethtown, August 8, 1958
Jones, Cody H., Lynn Grove, May 20, 1958
Keen, L. O., Louisville, November 7, 1957
McKissick, John C., Bowling Green, October 29, 1957
Moore, W. B., Louisville, September 20, 1958
Morris, Benjamin F., Paducah, August, 1958
Morris, Charles D., Louisville, July 19, 1958
Oliver, Robert L., Louisville, November 4, 1957
Parrott, John S., Tinsley, November 1, 1957
Petty, Charles M., Independence, December 3, 1957
Podderman, Hugo, Louisville, December 6, 1957
Powell, Annie M., Louisville, March 19, 1958
Prewitt, John M., Mt. Sterling, December 3, 1957
Reeves, William S., Hillsboro, January 23, 1958
Richardson, John B., Louisville, January 12, 1958
Rollings, J. D., Lacenter, December 6, 1957
Rozentals, P. V., Louisville, May 20, 1958
Schultz, Leonard M., West Point, October 2, 1957
Scifres, Zack M., Louisville, March 8, 1958
Spaulding, James R., Lebanon, November 6, 1957
Taylor, A. Porter, Lexington, September 16, 1957
Thayer, Lyman I., Paris, November 9, 1957
Usher, F. M., Hickman, September 7, 1957
Walter, Earle C., Mayfield, May 13, 1958
Williams, Rodman H., Chaplain, June 8, 1958
Wilson, Claud, Greenville, August 2, 1958
Winston, Jos. P., Anchorage, June 15, 1958
Witherspoon, W. H., Louisville, July 17, 1958

A minute of silent prayer was observed in their honor.

The Secretary made the general announcements stating that the opening ceremonies would begin at 8:45 A.M., Tuesday at the Columbia Auditorium followed by a panel discussion and several very worthwhile scientific papers. He pointed out that five and one-half hours of color television was interspersed throughout the meeting, all of which originated in Louisville. He urged attendance at the President's Luncheon in the Crystal Ballroom of the Brown Hotel on Wednesday; announced that the meeting places for the General Nominating Committee and the Councilor Districts Nominating Committees would be designated at the close of the session; and pointed out that seven Reference Committees would meet Tuesday according to precedent.

The Speaker announced the Reference Committee appointments, subject to the approval of the House of Delegates, as follows:

Reference Committee No. 1—Reports of Officers and Councilors

Rudolph F. Vogt, M.D., Louisville, Chairman
Loman C. Trover, M.D., Madisonville, Vice Chairman

W. Burford Davis, M.D., Louisville
Boyce E. Jones, M.D., London
James S. Williams, M.D., Nicholasville

Reference Committee No. 2—Reports on Medical Care, Medical Education, Hospitals and Related Subjects

Thomas O. Meredith, M.D., Harrodsburg, Chairman
F. Hays Threlkel, M.D., Owensboro, Vice Chairman
Marc Reardon, M.D., Covington
Gladys L. Rouse, M.D., Florence
Robert S. Tillett, M.D., Louisville

Reference Committee No. 3—Reports on Legislation and Public Relations

Carl H. Fortune, M.D., Lexington, Chairman
J. Thomas Giannini, M.D., Louisville, Vice Chairman
William H. Barnard, M.D., Elizabethtown
H. F. Chambers, M.D., Campbellsville
R. L. Houston, Jr., M.D., Eminence

Reference Committee No. 4—Reports on Miscellaneous Business

Robert S. Dyer, M.D., Louisville, Chairman
Fred Cecil, M.D., Horse Cave, Vice Chairman
C. Walker Air, M.D., Ludlow
Albert H. Joslin, M.D., Beaver Dam
Max D. Klein, M.D., Shelbyville

Reference Committee No. 5—Reports on Miscellaneous Business

O. Leon Higdon, M.D., Paducah, Chairman
Millard C. Loy, M.D., Columbia, Vice Chairman
T. R. Bryant, M.D., Lexington
Richard J. Rust, M.D., Newport
L. H. Segerberg, M.D., Louisville

Reference Committee No. 6—Reports on Miscellaneous Business

Blaine Lewis, Jr., M.D., Louisville, Chairman
Douglas H. Jenkins, M.D., Richmond, Vice Chairman
Theodore L. Adams, M.D., Lexington
Harold Keen, M.D., Bowling Green
Frederick R. Scroggin, M.D., Dry Ridge

Reference Committee No. 7—Reports on Miscellaneous Business

Lillard F. Beasley, M.D., Franklin, Chairman
Carl Cooper, Jr., M.D., Bedford, Vice Chairman
L. Douglas Atherton, M.D., Louisville
N. L. Bosworth, M.D., Lexington
Paul F. Maddox, M.D., Campton

Motions were duly made, seconded and carried that the Reference Committee appointments as made by the Speaker of the House be accepted, and that he be authorized to add additional members from the House of Delegates in the event of the absence of appointed members and alternates, as necessary.

The reports of the officers and committees were presented at this time and referred by the Speaker to the Reference Committee indicated below as follows:

Report of the President—Reference Committee No. 1.

Report of the President Elect—Reference Committee No. 1.

Report of the Speaker of the House—Reference Committee No. 1.

Report of the Chairman of the Council and Recommendations of the Council—Reference Committee No. 1, with the exception of the recommendation of a Bylaw change to Reference Committee No. 4, and the recommendation on National Voluntary Health Agencies to Reference Committee No. 5.

Glenn U. Dorroh, M.D., Lexington, a member of the Awards Committee, presented the committee's nominations as follows:

Distinguished Service Award—Joseph E. Johnson, M.D., South Williamson.

Outstanding General Practitioner Award—Brent Weddle, M.D., Somerset.

Motions were duly made, seconded and carried that Doctor Johnson be presented the Distinguished Service Award and Doctor Weddle be presented the Outstanding General Practitioner Award.

Other reports were received and referred as follows:

Report of the Secretary—Reference Committee No. 1.

Report of the Editor—Reference Committee No. 1.

Report of the Treasurer—Reference Committee No. 1.

Report of the Delegates to AMA—Reference Committee No. 1.

Report of the Executive Secretary—Reference Committee No. 1.

Report of Committee to Study the Constitution and Bylaws—Reference Committee No. 4

Report of Committee on the Corporate Practice of Medicine—Reference Committee No. 4

Report of Committee on Medical Education and Economics—Reference Committee No. 2.

Report of Medico-Legal Administrator—Reference Committee No. 5.

Report of Advisory Committee to the Editor—Reference Committee No. 6.

Report of Committee on Public Information and Service—Reference Committee No. 3.

Report of Committee on Physicians Placement Service—Reference Committee No. 7.

Report of Committee on Legislation—Reference Committee No. 3.

Report of Committee on Medicare — Reference Committee No. 2.

Report of Committee to Study Relations with Voluntary Health Groups—Reference Committee No. 5.

Report of Committee on Scientific Assembly and Arrangements—Reference Committee No. 2.

Report of Committee on Emergency Medical Services—Reference Committee No. 6.

Report of McDowell Home Committee—Reference Committee No. 5.

Report of Committee on Rural Health—Reference Committee No. 7.

Report of Committee on Labor-Management Health Plans—Reference Committee No. 3.

Report of the Advisory Committee to Woman's Auxiliary—Reference Committee No. 6.

Report of Committee on Medical Services—Reference Committee No. 6.

Report of Committee on Allied Professions—Reference Committee No. 2.

Report of KSMA Representative to Conference of Presidents and Other Officers of State Medical Associations—Reference Committee No. 5.

Report of KSMA Representatives on Joint Commission for Improvement of Patient Care—Reference Committee No. 7.

Report of KSMA Adviser to University of Louisville Student AMA Chapter—Reference Committee No. 6.

Report of Advisory Committee to Selective Service—Reference Committee No. 4.

Report of Professional Relations Committee—Reference Committee No. 2.

Report of Woman's Auxiliary to KSMA—Reference Committee No. 6.

Report of Board of Directors of the Kentucky

Physicians Mutual, Inc.,—Reference Committee No. 5.

Report of Rural Kentucky Medical Scholarship Fund—Reference Committee No. 7.

Recommendation of Constitution Changes—Reference Committee No. 4.

The Speaker then called for the presentation of new business to the House, explaining that the Council's recommendation on the Bylaw Change would be known as Resolution A, and its recommendation on National Voluntary Health Agencies would be known as Resolution B.

The new business was then presented to the House and referred to Reference Committees by the Speaker as follows:

(C) Resolution of the Ohio County Medical Society concerning a constitutional amendment on membership requirements — Reference Committee No. 4.

(D) Resolution of the Jefferson County Medical Society concerning a standard insurance claim blank form—Reference Committee No. 2.

(E) Resolution of the Jefferson County Medical Society concerning the Reapportionment of Councilor Districts—Reference Committee No. 4.

(F) Resolution of the Jefferson County Medical Society concerning AAGP representation on the Joint Commission for Accreditation of Hospitals—Reference Committee No. 3.

The Spcaker then received the following items of business and referred them to Reference Committees as indicated:

A letter to the House of Delegates from the Taylor County Medical Society concerning a Taylor County physician—Reference Committee No. 3.

Suggested Bylaws of the Kentucky Health Council—Reference Committee No. 7.

The Speaker then designated meeting places for the Nominating Committee for General Officers and the five Councilor Districts' Nominating Committees to be held immediately at the close of this session. He announced that Tuesday afternoon at the second scientific session, the Nominating Committee would make known its recommendations for the various state offices. This has been scheduled just before the first lecture at 2:00 p.m. On Wednesday night at the second session of the House, additional nominations might be made from the floor without discussion or comment.

The Secretary announced that the Jefferson County Medical Society wishes to make known that they will have a booth in the exhibit hall with a telephone available and a staff member of the Society will be present in the booth at all times to be of service whenever possible.

The Speaker then thanked Doctor Pedigo, Mr. Davis, and the Headquarters Office for their kind assistance, and to the members of the House in particular he expressed his appreciation for their kind attention during the evening.

There being no further business a motion was duly made, seconded and carried that the meeting adjourn at 9:40 P.M.

Second Session

The second session of the Kentucky State Medical Association House of Delegates was called to order on Wednesday, September 24, 1958, by the Speaker, Clyde C. Sparks, M.D., in the Roof Garden of the Brown Hotel, Louisville at 7:15 P.M. The invocation was given by the Reverend James S. Curry, Superintendent of Louisville West District, Methodist Church, after which Robert A. Orr, M.D., a member of the Credentials Committee, reported that a quorum was present.

Walter L. O'Nan, M.D., Chairman of the Council, presented the final report of the Council as follows:

The Council passed the following resolution at its September 24 meeting:

"WHEREAS, The 1958 Annual Meeting of the Kentucky State Medical Association has been well attended and generally accepted as being one of the outstanding meetings that this Association has held, and

"WHEREAS, The Committee on Scientific Assembly and Arrangements, our guest speakers, thirteen cooperating Specialty Groups, and all others worked together so successfully in developing an outstanding scientific program, and

"WHEREAS, The University of Louisville has developed and presented a most profitable color television program of five and one-half hours in length, and

"WHEREAS, The Smith, Kline and French Laboratories, at considerable expense, used their color television broadcasting facilities to greatly enhance the effectiveness of our meeting, and

"WHEREAS, The Columbia Auditorium, the Brown Hotel, along with many other organizations and individuals, have cooperated to help make this meeting successful,

"NOW, THEREFORE, BE IT RESOLVED, That the House of Delegates of the Kentucky State Medical Association go on record as expressing its deep appreciation to all individuals and organizations that had any part in developing and presenting the 1958 Annual Meeting."

Mr. Speaker, I move the adoption of this resolution. The motion was duly seconded and carried.

The Secretary announced that he had no specific matters to present to the House at this time. He did, however, ask the following distinguished visitors to stand for recognition: G. A. Woodhouse, M.D., President of the Ohio State Medical Association; Harold Kamp, M.D., Secretary and Treasurer of the Illinois State Medical Association; and B. E. Montgomery, M.D., Chairman of the Council of the Illinois State Medical Association.

The Speaker of the House of Delegates stated that he would now appoint two tellers committees as follows: W. R. Houston, M.D., Erlanger, Herschell B. Murray, M.D., West Liberty, and Elgin S. Dunham, M.D., Edmonton, on Tellers Committee No. 1; and Theodore L. Adams, M.D., Lexington, Alfred D. Doak, M.D., Shelbyville, and William H. Bizot, M.D., Louisville, on Tellers Committee No. 2.

The reports of the Reference Committees were then presented.

REFERENCE COMMITTEE NO. 1

Rudolph F. Vogt, M.D., Chairman

Reports of Officers and Councilors

Report of the President

The President reported that the year had been an enjoyable one, though busy, and it seemed that the work of the officers of the Association was continually increasing. He commented on legislation in Kentucky this past year and felt it was time for an offensive action on the part of physicians instead of defensive. He felt that the Washington dinner had been a noted success and recommended its continuance. Further remarks had to do with the visiting of all councilor districts with the exception of two; with the President's Page in The Journal in which he tried to show what is true Americanism; and his appreciation was expressed to the entire Association and Headquarters staff for a job well done. The President's Supplemental Report had to do with the serious threats of third party medicine and the fact that the profession is constantly being confronted with health legislation. In view of these matters, he felt that all physicians as individuals should be ever watchful and alert, and urged them to unite and work together with expanded efforts to alleviate this situation. He recommended: (1) That all doctors become interested in the field of legislation; (2) That doctors work for the election of men to the legislature and congress who have America at heart; (3) That the KSMA Legislative Committee continue to work for sound medical legislation, and the alternate AMA delegates continue their study on a national basis and report to the Legislative Committee. That a new committee, probably of the three past presidents, be appointed and empowered to draft the essence of needed legislation and pass their proposals and findings to the Legislative Committee. This new committee is not to be a part of the regular legislative committee, and was suggested that KSMA propose such a committee to the AMA; (4) That a general revamping of our committee structure be made; and (5) That a continued study, both on a state and national level, of the shortage of nurses be made.

The Reference Committee recognizes the ever-increasing difficulties faced by the president. Dr. Edward Mersch had been untiring in his efforts to meet and solve the problems of his administration.

Dr. Mersch closed his report with specific recommendations, three of which were referred to other committees.

The recommendations referred to our committee deal with challenging admonitions for us to be ever alert to the legislative maneuvers affecting medicine, on local, state, and national levels.

He also has challenging remarks directed to the man entering the practice of medicine to avoid the pitfalls of third party medicine.

We approve all of his recommendations including the study of the shortage of nurses.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried that the Report of the President be adopted.

Report of the President Elect

The President Elect reported that he had served on a number of KSMA committees and during the past year had become increasingly aware of the importance of the Association's services to its members. He said that he would like to pledge his best efforts in the task ahead and thanked the president, secretary and chairman of the Council for their assistance in helping train him for the coming year.

Our President Elect's report was reviewed. His wide experience on committees in the KSMA has prepared him well for the duties of the presidency.

We wish him every success in facing the challenge offered by the retiring president, Doctor Mersch.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried that the Report of the President Elect be adopted.

Report of the Speaker

The Speaker of the KSMA House of Delegates reported that he had been working with the Council and the Headquarters office in an effort to make the meetings of the House more comfortable and convenient. He said that both meetings would be subscription dinner meetings in the Roof Garden of the Brown Hotel and telephone services would be available. He pointed out that the responsibilities of his office had been carried out, and the assistance and cooperation of the Council and officers of the Association was most appreciated.

Report No. 3 of the Speaker of the House of Delegates was studied.

Reference Committee No. 1 wishes to commend the Speaker for his excellent arrangements in creating a suitable climate for the best efforts on the part of the House of Delegates.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried that the Report of the Speaker be adopted.

Report of the Council

The report of the Council was presented by Walter L. O'Nan, M.D., Chairman, and consisted of a brief resumé of the matters of business which came before the Council during the 1957-58 Associational year, as follows:

Report of the Council to the 1958 Session of the House of Delegates

The practice of printing a digest of the minutes of the Council in The Journal of KSMA, as authorized by the House of Delegates of KSMA in 1956, was continued through the 1957-58 year. It will also be recalled that the House of Delegates, at that time, authorized the Chairman to "read to the House of Delegates a brief resumé of the highlights of Council action for the previous year."

The Council has held five meetings during the past year. The fifth meeting was known as an "open meeting." The open meeting requested by the 1957 House of Delegates was for the purpose of inviting any KSMA member who wished to attend to be present in order to observe the Council in action. (Any member of the Association, of course, can appear before the Council at any time to present business for the Council.)

The Executive Committee of the Council held only three meetings during the Associational year. Minutes of both the Executive Committee and Council are on file at the Headquarters office and may be viewed by any member at any time.

A digest of the highlights of Council actions during the 1957-58 Associational year are as follows:

FIRST MEETING. The Council held its first and organizational meeting of the new year on Thursday,

September 19, 1957, at the Brown Hotel. Temporary Chairman, Branham B. Baughman, M.D., called the meeting to order.

New members of the Council introduced by Doctor Baughman were: Robert W. Robertson, M.D., Paducah, President-elect; Walter R. Byrne, M.D., Russellville, Vice-president from West Kentucky; John P. Glenn, M.D., Russellville, Councilor from the Sixth District; Joe M. Bush, M.D., Mt. Sterling, Councilor from the Eleventh District; Keith P. Smith, M.D., Corbin, Councilor from the Fifteenth District. (Vice-president from the Central district, John S. Harter, M.D., Louisville, and Vice-president from the Eastern district, Richard G. Elliott, M.D., Lexington, were not present to be introduced.)

The temporary Chairman then called for nominations for Chairman of the Council. Walter L. O'Nan, M.D., Henderson, was elected without opposition and assumed the chair.

Elected Vice-chairman was Garnett J. Sweeney, M.D., Liberty. The next business of the Council was to set up the new Executive Committee. It was explained that the bylaws provided that the President, President-elect, Secretary, Vice-chairmen and Chairman of the Council automatically served on the Executive Committee, together with two members elected by the Council. In these two positions the Council elected Doctor Baughman, and Keith Crume, M.D., Bardstown. The Chairman of the Council serves as Chairman of the Executive Committee.

SECOND MEETING. The Council held its second meeting, a day-long session, in the Brown Hotel, Thursday, December 12, 1957.

President Edward B. Mersch, M.D., Covington, reported that the Committee on Scientific Assembly and Arrangements was well along in its preparations for the 1958 Annual Meeting. He announced that there would be color television, and the Council accepted his recommendations that award winners be presented at the President's Luncheon and that inaugural ceremonies take place on Wednesday night at the House of Delegates meeting.

At the request of the President, the Council voted to thank the Ames Company for its invaluable assistance in the 1957 Diabetes Detection Drive.

The KSMA delegation to the AMA clinical meeting in Philadelphia reported that the most hotly debated issue at that meeting was fluoridation of water. Other highly important matters acted on were the Forand Bill, UMWA problems, and Medicare. W. Vinson Pierce, M.D., Covington, senior delegate to the AMA from Kentucky, said that the AMA House of Delegates stood in recognition of the passing of Clark Bailey, M.D., who had represented KSMA in that body for many years. He said there were many expressions of sympathy and concern over Doctor Bailey's death.

The Presidential address of David B. Allman, M.D., AMA president, which urged that medicine mobilize its strength in an effort to defeat the Forand Bill, was highly complimented.

Doctor Pierce told the Council that Clyde C. Sparks, M.D., former KSMA president, had been named by the Council on Medical Service to take Doctor Bailey's place on the AMA Committee on Medical Care for Industrial Workers.

Both delegates emphasized the need for a larger representation from Kentucky to cover the various activities of the House, and especially urged that the President and President-elect attend the meeting of the AMA House of Delegates each year.

The Headquarters Office report stated that as of December 1, 1957, 2062 members had paid their KSMA dues, and 1716 had paid their AMA dues. It stated that the Diabetes Detection Drive had apparently been a success; that plans for the County Society Officers Conference in Lexington on March 27 were nearing completion; and that the Senior Day Committee was to meet to draft plans for the April, 1958 annual Senior Day program.

It was also noted that the Headquarters Office had been active in promoting district councilor meetings and working with the various committees and agencies of the Association.

Robert C. Long, M.D., Louisville, chairman of the special Medicare Committee, gave a lengthy and detailed report of his findings at the recent Philadelphia meeting of the AMA and the special meeting on Medicare which was held on December 6 following the close of the AMA sessions. Doctor Long pointed out that the KSMA House of Delegates had authorized his committee to negotiate a new contract with the Defense Department on an indemnity basis and that it had called for a special meeting of the House three months before the new contract was to be signed.

Following Doctor Long's report, comments from Doctor Pierce, and questioning by the Council, it was agreed that it would not be possible under the present law to negotiate the type of contract that was desired. It was pointed out that if no contract were negotiated at all, the members of the Association would have no voice in the operation of the program in Kentucky. After further discussion the Council voted to hold in abeyance the two directives of the House of Delegates at the 1957 session in connection with the Medicare contract.

F. P. Zuspan, M.D., an employee of the Miners Hospital at McDowell, Kentucky, was introduced to the Council. Doctor Zuspan had requested a hearing before the Council because his application for membership in the Floyd County Medical Society had not been acted upon favorably.

Doctor Zuspan read a 25-minute statement, which was followed by a question and answer period, and then left the meeting. The Council discussed the matter at some length and then referred Doctor Zuspan's 16-page appeal to the Association's attorney, Mr. E. Gaines Davis, for careful study and report at the next meeting of the Council.

Some of the legislative proposals which would be offered by the Health Department at the 1958 session of the Legislature, were reviewed by the Health Commissioner, Russell E. Teague, M.D.

The Council voted to hold the 1960 Annual Meeting on September 20, 21, and 22 at the Columbia Auditorium in Louisville.

The term of William H. Fuller, M.D., Mayfield, on the State Board of Health expires on December 31, 1957. As provided by law the Council nominated three physicians: William H. Fuller, M.D., Mayfield; O. Leon Higdon, M.D., Paducah; and Wilbur R. Houston, M.D., Erlanger. The names are submitted to the Governor for his consideration in naming an appointee to fill the vacancy.

The House of Delegates mandate relative to the Corporate Practice of Medicine was considered by the Council and after discussion it voted to consider itself as a committee to implement the mandate.

Gaithel L. Simpson, M.D., Greenville, gave the Council a summary of the latest developments and recommendations of the Governor's Commission on Indigent Medical Care. Using a large chart, Doctor Simpson outlined the proposals of the new law and pointed out that every member of the Association had received a copy of a Summary Report from the Health Department. Following Doctor Simpson's presentation, the Council went on record as approving the principles of the program as presented by Doctor Simpson. It also voted to express its appreciation to Doctor Simpson and other KSMA representatives on the Commission.

Thomas Leonard, M.D., Frankfort, chairman of the KSMA Legislative Committee, reported on the developments of the November 14, 1957 meeting. Included in this report were the following subjects: the advantages of having a model autopsy law in

Kentucky, the need for a law controlling quick cremations, and legislative proposals covering the licensing of physical therapists in this state. Doctor Leonard also discussed the future of legislative proposals of the Governor's Commission on Indigent Medical Care.

Doctor Leonard asked the Council to appoint someone to fill the vacancy on the Legislative Committee caused by Doctor Bailey's death. The Council asked Keith P. Smith, M.D., Councilor from the Fifteenth District, to investigate this matter.

It was reported that correspondence was received by many Kentucky physicians from the Department of Economic Security, relative to a fee schedule. It was "the general opinion of the Council that no set fee should be stated and that the physician in question should reply that he based his charges on the work done or fee-for-service basis."

The Council appointed Sam A. Overstreet, M.D., chairman of the KSMA's Committee on Professional Relations to fill a vacancy created by the death of Doctor Bailey.

George Archer, M.D., Prestonsburg, was elected alternate delegate to the AMA to serve with Robert C. Long, M.D., who filled the vacancy created by the death of Doctor Bailey.

The Executive Secretary was authorized to use his best judgment in the purchase of adequate addressograph equipment for the Association.

THIRD MEETING. The third meeting of the Council was a special called session held February 8, 1958 in the Brown Hotel. This meeting related to problems of interest to be considered for the Legislature which was then in session.

FOURTH MEETING. This session was held Thursday afternoon and evening at the Phoenix Hotel, Lexington, following the County Society Officers Conference on March 27, 1958.

The Headquarters Office was authorized to express the appreciation of the Council to the Kentucky Surgical Society for its contribution of $1000 for use in the operation of the McDowell Home.

The proposed budget for the fiscal year beginning July 1, 1958 and set up in a day-long meeting of the Budget Committee, was considered. It was stated that the Executive Committee of the Council had carefully gone over the proposed budget and recommended it to the Council. The budget was approved.

The Council accepted the recommendation of the Executive Committee that a second chairman be appointed on the Legislative Committee to handle affairs at the national level. It was felt that it was asking too much of the chairman to handle legislative affairs both at the state and national level. The Council accepted the recommendation that the alternate delegates to the AMA serve in this capacity.

The Council was told that the Advisory Committee on Public Health had made a recommendation to the Executive Committee, which in turn had approved the recommendation and passed it on to the Council, that an ad hoc committee for radiation research be appointed to work with the Commissioner of Health. This recommendation was accepted and the committee appointed.

The Council also accepted the recommendation of the Executive Committee that the title of the Field Secretary be changed to that of Assistant Executive Secretary.

The Council then gave further consideration to the appeal of Frederick P. Zuspan, M.D., McDowell, Kentucky. Doctor Zuspan was present and his problem was discussed for a considerable length of time, at the conclusion of which he was thanked for his appearance and for the information that he had given.

It was decided by the Council that the 1958 Annual Meeting of the House of Delegates, both Monday, September 22, and Wednesday, September 24, would be held in the Roof Garden of the Brown Hotel. It was later decided that a subscription dinner would be optional for the delegates prior to the actual calling of the meeting to order.

The Council then considered a resolution submitted by the Jefferson County Medical Society to be presented by the KSMA delegates to the AMA House of Delegates in San Francisco in June. The resolution called on the AMA to expend its best efforts in first, calling attention to the members of the medical profession and second to the public the advantages inherent in the free choice of physician system and the evils of any medical service plan which tends to exploit the patient, physician, or otherwise lower the standards of medical care. The Council accepted this resolution and authorized its delegates to present this resolution at the 1958 Annual Meeting of the AMA.

A report on the 1958 Legislative Session was made by Doctor Baughman. He explained how the activities in the Legislature developed and the disposition of the legislative proposals in which KSMA was interested. Mr. Bobbie R. Grogan, whose title has just been changed to Assistant Executive Secretary, was highly complimented for his work in the Legislature. Attention of the Council was called to the resolution passed the last day the Legislature was in session, entitled "HR 131." The resolution authorized the Governor to appoint a commission to study, in cooperation with the Legislative Research Commission, medical service plans and report by November 15, 1959. The President was authorized to submit a list of nominees to the Governor for membership on the "Commission on Medical Service Plans."

FIFTH MEETING. The fifth meeting of the Council, an "open session," was held at the Brown Hotel in Louisville on Thursday, July 31, 1958.

The Chairman of the Council explained that this was an open meeting to which all members of the Association were invited and that it was held for the purpose of letting the membership see how the Council operates. He welcomed the guests that were present.

The report of the President was heard, followed by the full and thought-provoking report of both Delegates to the 1958 Annual Meeting of the AMA. The Headquarters Office report was discussed by the Secretary and the Commissioner of Health made comments.

The Council then heard a recommendation by Wyatt Norvell, M.D., New Castle, Chairman of the Kentucky Rural Health Council, that KSMA participate in efforts with several state-wide groups, including the Kentucky Pharmaceutical Association and the State Department of Health, to set up poison control centers over the state. The Council accepted this recommendation and also authorized the Chairman of the Council, Walter L. O'Nan, M.D., Henderson, and Doctor Norvell to appoint a member to represent KSMA.

A recommendation of the Insurance Committee that a standard short claim insurance form be accepted was heard. The Council was told the form was acceptable both to the insurance companies and to the members of the KSMA Insurance Committee. Action, however, was deferred on the form until the meeting of the 1958 House of Delegates.

A letter from Guy Aud, M.D., Louisville, editor of The Journal of KSMA, stating that he was resigning as editor because of his health was read. The Council accepted his resignation with great reluctance and authorized the Headquarters Office to express its appreciation to Doctor Aud for the two years of service that he had rendered as editor and the many years he had served The Journal as chairman of the Advisory Committee to the Editor. Sam A. Overstreet, M.D., Louisville, was elected as Editor of The Journal to succeed Doctor Aud, and George W. Pedigo, Jr., M.D., Louisville, was named Associate Editor.

The Chairman of the Council then read a recommendation from the Legislative Committee. It was pointed out that legislation pertaining to the health of the people and matters of interest to the profession in the legislative halls at both the national and state levels was becoming of increasing importance. The Legislative Committee felt that the medical profession should make a greater effort to coordinate its activities and to plan more effective efforts in this field. In order to do this it was recommended that a full-time representative for this type of work be employed by the Association. After much discussion this recommendation was accepted pending the willingness of the Asscciation to finance such an effort.

Doctor O'Nan pointed out that the Rural Kentucky Medical Scholarship Fund now has more than $225,000 in its revolving fund; that it had helped or was helping some 150 students become physicians; and that these physicians would practice in rural areas. It was pointed out that it was necessary to follow almost 100 students and recently graduated doctors in order to adequately administer this Fund. It was indicated that the Board of Trustees of the Scholarship Fund was prepared to contribute to the payment of salary to a Field Secretary in return for 1/5th or 1/4th of his time working on the Scholarship Fund. This recommendation was accepted and it was indicated that Bobbie R. Grogan, the Assistant Executive Secretary, would take over these duties.

The Committee on Postgraduate Medical Education presented a recommendation through its Chairman, Walter S. Coe, M.D., Louisville. Doctor Coe pointed out that the demands for a more adequate postgraduate medical education program in our Association were increasing and he related some of the difficulties that had been experienced in trying to develop such a program. For one thing, he stated, less than 1% of the Association's budget was alloted to this program, which, in the opinion of his committee, should take second place to no other Association activity. The first request of the Committee was that the Council authorize the reorganization of the Committee on Postgraduate Medical Education to take in certain groups such as, the Universities of Louisville and Kentucky, the Academy of General Practice, either the Kentucky Surgical Society or the Kentucky Chapter of the American College of Surgeons, the Kentucky Chapter of the American College of Physicians, the Pediatric Association, and two members at large who are general practitioners. The terms of office would be staggered so that each appointee would serve three years so that there would be a continuity in membership. This recommendation the Council accepted.

The second request of the Committee was for adequate funds to develop such a program. After full discussion of what was contemplated, Doctor Coe indicated that a minimum of $10,000 a year would be required to develop and maintain any worthwhile program in this field.

The Council then considered as a whole the Legislative request, the request of the Committee on Postgraduate Medical Education, and the Rural Kentucky Medical Scholarship Fund, and other activites of the Association which required funds. After considerable debate, the Council voted to ask that the Committee to Study the Constitution and Bylaws present a recommendation to the 1958 House of Delegates calling for an increase in dues with a certain portion of it earmarked for use by the Committee on Postgraduate Medical Education.

The Council then considered the appeal of Frederick P. Zuspan, M.D., McDowell, Kentucky, an employee of the UMWA Hospital there, who had been refused membership in the Floyd County Medical Society. Following a careful and lengthy consideration of the matter a motion was duly made, seconded, and carried without dissenting vote, that the Council of KSMA inform Doctor Zuspan that because of the autonomous nature of county societies it is powerless to require the Floyd County Medical Society to admit him to membership, but that under the bylaws the Council grants him the privilege of applying to an adjacent county for membership therein.

The Council then agreed to authorize the President and the Chairman of the Council to appoint a committee of five to "meet with representatives of third party medicine and deal with problems relating thereto."

The Council then accepted a recommendation from the Committee to Study a Change in the Annual Meeting date, that no changes be made at this time. It set the dates of September 19, 20, and 21 for the 1961 Annual Meeting and refused to act on a suggestion that a committee be appointed to consider the new Kentucky Fair and Exposition Center as a probable meeting place.

William R. Willard, M.D., Vice President of the University of Kentucky in charge of the Medical Center, recommended the continuance of the Advisory Committee from KSMA to the University of Kentucky with the Council appointing members of the committee as their present terms expire. This recommendation was accepted.

Sympathetic consideration was given to the request of the Jefferson County Medical Society Auxiliary that booth space be furnished for it to conduct a raffle. The request was regretfully refused because of lack of space and other considerations.

Respectfully submitted,
Walter L. O'Nan, M.D.,
Chairman of the Council

The report of the Council of KSMA to the House of Delegates.

The Reference Committee No. 1 would like to register approval of the continued publication of Council activities in the KSMA Journal.

The report of the Council shows that long, arduous hours have been given *unselfishly* by the members of the Council. It is noted that there is an ever-increasing burden placed on this group.

The policy of holding open meetings seems to be one of encouraging interest in KSMA activities.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried that the Report of the Council be adopted.

Report of the Secretary

The Secretary reported that he wishes every member of KSMA could serve at least one term as Secretary and receive from this vantage point an entirely new concept of the vastness of activity, the importance and worth of its operation to the people and medical profession, the feeling of pride in its accomplishments, and the gravity of the unsolved problems facing medicine today. He stated that one of the issues facing medicine was the third party medical service plans and the role the physician is to play in their operation. The Secretary pointed out that this had been a busy year during which he had attended all meetings of the Council, Executive Committee of the Council, Budget Committee, other KSMA and allied affairs meetings, and sessions of the Kentucky State Legislature. He felt that the Washington dinner honoring senators and congressmen was of great value and had been obviously appreciated, and that keeping in close contact with these legislators is most important. He then thanked all the officers and committees for their

activities on behalf of the Annual Meeting, and the Headquarters Office for their cooperation with his office.

The report of the Secretary of the KSMA, Doctor Troutman, was received and studied.

The Reference Committee feels that the KSMA is fortunate in having a Secretary who shows such great interest and expends his time and resources so freely in the pursuits of the Association.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried that the Report of the Secretary be adopted.

Report of the Editor

The Editor of The Journal of KSMA reported that The Journal had continued to make substantial progress during the 1957-58 Associational year, and he commended the four associate editors for their highly satisfactory performance of duties. He paid high commendations to the twenty-four physicians on the Board of Consultants on Scientific Articles, and expressed gratitude to the Advisory Committee to the Editor and the contributors to The Journal. He touched on the importance of using the services of the advertisers, whenever possible, and stated that they were obtained through the State Medical Advertising Bureau in Chicago, which sponsors a conference every two years that is of great benefit to Journal staff members. He hoped that the Journal would continue in its forward progress and remain a publication in which Kentucky's physicians could justifiably take pride.

The report of the Editor of the Journal of KSMA was read and approved.

The committee unanimously concurs with the words of praise of the Speaker of the House of Delegates concerning the accomplishments of Dr. Guy Aud as editor of the Journal.

It is with regret that the Committee recognizes the retirement of Dr. Aud as editor of the Journal of KSMA.

We feel the Journal will continue on its high plane under the direction of Doctor Sam A. Overstreet and his well qualified staff.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried that the Report of the Editor be adopted.

Report of the Treasurer

The Report of the Treasurer contained the audit of Christen, Brown, McCroskey and Rufer, Certified Public Accountants, of the Association's financial situation for the fiscal year ending June 30, 1958.

The report of the Treasurer was reviewed.

We find the financial affairs of the Kentucky State Medical Association in proper order and recommend the report's approval.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried that the Report of the Treasurer be adopted.

Report of the KSMA Delegates to AMA

The report of the Delegates to the AMA paid tribute to the memory of Doctor Clark Bailey who died during the past year and it was stated that his wise counsel and leadership would long be missed. It went on to report that at the Clinical Session of the AMA in Philadelphia, both delegates were in attendance and at the Annual Meeting in San Francisco, both delegates and alternate delegates were in attendance together with the President-Elect and Executive Secretary, and that at this meeting for the first time KSMA had adequate representation at the various meetings. Several important matters were brought to the attention of the AMA at its Clinical Session, among which were: the fluoridation of public water supplies; the introduction of resolutions concerning third party medicine and the free choice of physicians; the contract practice of medicine; the Heller Report concerning the organization of the AMA and the change in its set up; the approval of support of the Jenkins-Keogh Bill; and the condemnation of the Forand Bill. At the San Francisco session the third party medicine matter continued to be an extremely controversial issue. Other subjects acted upon by the House were Social Security for physicians, Veterans Medical Care, the Medicare program, the Association's Washington office, hypnosis, advertisement of over-the-counter medications, and preparation for general practice. New officers elected were: Lewis Orr, M.D., Orlando, Florida, President Elect; Linwood Ball, M.D., Richmond, Virginia, Vice President; Vincent Askey, M.D., Los Angeles, California, Speaker of the House; and Norman Welch, M.D., Boston, Massachusetts, Vice Speaker of the House.

The report of the Delegates to AMA was carefully studied.

This well presented report of activities shows that we have been well represented at a national level. We note with pride the recognition our delegates received in the House of Delegates of the AMA.

Words cannot express our feeling of loss in the untimely death of Doctor Clark Bailey. His steadying influence will be sorely missed by the Association.

The delegates to the AMA have voiced the need for better Kentucky attendance at these AMA meetings, to better inform us on reference committee activities.

Our Reference Committee approves the suggestion that Alternate Delegates be sent to AMA meetings.

We feel it would be of interest to know the stand taken by our representatives on major controversial issues.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried that the Report of the Delegates to the AMA be adopted.

Report of the Executive Secretary

The report of the Executive Secretary briefly covered the activities of the Headquarters Office during the 1957-58 Associational year, during which year forty-six meetings of KSMA organizations were attended, seven of which were Council and Executive Committee of the Council meetings. The Headquarters office work has covered many and varied fields this year, and under the pertinent authorities the following projects were carried out: meetings of committees and councilor districts are scheduled, promoted, agenda planned, minutes written, and policies implemented; representation at 11 non-KSMA meetings of allied groups; representation at 15 state, regional, and national medical meetings; attendance at the State Legislature carrying out the directives of officers and Legislative Committee; preparations for Annual Meet-

ing, including 22 scientific sessions, and other activity incident to the Meeting; implementation and handling of all the promotion and arrangements for the County Society Officers Conference; assembling of material for The Journal including scientific copy, organizational news, and advertising; processing and mailing each month of the Secretary's Letter and News Capsules; publication of postgraduate medical opportunities brochure; and major public service programs such as the Kentucky Physicians Mutual, Rural Kentucky Medical Scholarship Fund, and Kentucky Physicians Placement Service. The Executive Secretary expressed his deep appreciation to the officers and members of the Council, the President, Speaker of the House, Chairman of the Council, Secretary, Editor of The Journal, Headquarters staff, and Mr. Grogan for their cooperation.

It is ever a source of satisfaction to recognize the consistent excellence of our Executive Secretary's work.

We approve his report in its entirety.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried that the Report of the Executive Secretary be adopted.

Mr. Speaker, I move the adoption of the report of Reference Committee No. 1 as a whole.

The motion was seconded and carried that the Report of Reference Committee No. 1 be adopted as a whole. The Chairman thanked the members of his committee for their assistance.

Signing the report of Reference Committee No. 1 were: Rudolph F. Vogt, M.D., Louisville, Chairman; Loman C. Trover, M.D., Madisonville, Vice Chairman; W. Burford Davis, M.D., Louisville; Boyce E. Jones, M.D., London; James S. Williams, M.D., Nicholasville.

REFERENCE COMMITTEE NO. 2

Thomas O. Meredith, M.D., Chairman
Reports on Medical Care, Medical Education Hospitals and Related Subjects

Report of the Committee on Medical Education and Economics

The report of the Committee on Medical Education and Economics dealt in the main with the Indigent Medical Care bill which was defeated during the 1958 session of the State Legislature, and the request that this matter be discussed in the House of Delegates and either abandoned or a more concerted effort be put forth to secure passage. It pointed out that the district manager of the Social Security Division, after appearing at a meeting of the committee, had submitted articles for publication in three issues of The Journal clarifying the federal disability insurance program.

The Committee was very active during the year and had several meetings regarding the indigent medical care bill. Its recommendations are that the Kentucky State Medical Association give its complete support to an indigent medical care bill formulated by the physicians of the state and that each individual physician use his influence and effort to make this possible. If the Kentucky State Medical Association does not give its complete support to such a bill, it is possible that a similar one might be formulated by other agencies and exclude the physician from its administration.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried that this section of the report be adopted.

The Associate Advisory Committee to the University of Louisville School of Medicine had no meeting during the 1957-58 Associational year.

This Committee reported no meetings, no reports, and no recommendations.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried that this section of the report be adopted.

The Associate Committee on Veterans' Affairs had no report because of the absence of any problems.

The Committee reported that no problems had been presented during the year and, therefore, the Committee had nothing to report.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried that this section of the report be adopted.

The Associate Committee on Insurance reported two meetings during the year for the purpose of revising and standardizing a uniform claim blank for insurance companies. The standard form of the Campbell-Kenton County Medical Society and the Cincinnati Academy of Medicine was approved by the committee and subsequently by the Council of KSMA, but upon further investigation with the insurance profession it was felt that a compromise form requiring very little additional time to fill out would be more than offset by the advantages it would have to both physicians and insurance companies.

This Committee held two meetings during the year and met with the representatives of the insurance industry of Kentucky in regard to the adoption of a uniform claim form. The Insurance Committee approved the red form, as attached to your report, and Resolution D submitted by the Jefferson County Medical Society approving the recommendation of the Committee and resolving that this form be adopted.

Resolution D—To Adopt a Standard Insurance Claim Blank Form

"WHEREAS, in the best interest of all patients who are insured by prepayment medical insurance, regardless of the company, it is necessary that the attending physician provide the insurance company with certain vital information before a claim can be paid, and

"WHEREAS, all physicians are interested in promoting prepaid medical insurance as a sound method of providing payment for medical bills but are faced with the ever growing problem of the multiplicity of forms which are required by insurance companies, and

"WHEREAS, there would be less paper work for doctors in providing claims information and better service to both the patient and the insurance company if a claim form could be adopted which had a minimum number of questions clearly worded and arranged in standard sequence, and

"WHEREAS, after many years of meetings between representatives of insurance companies and physicians on a national, state and local level there is available, through the recommendation of the Insurance Committee, an Attending Physicians Statement which has the approval of the AMA Council on Medical Service, the KSMA Insurance Committee and the Medical Economics Committee of the Jefferson County Medical Society, and

"WHEREAS, this Attending Physicians Statement has the approval of representatives from the Kentucky

Insurance Industry and is the result of their wonderful spirit of cooperation and compromise which is a very important factor in its practical application, therefore,

"BE IT RESOLVED, that the House of Delegates of the Kentucky State Medical Association approve the report of its Insurance Committee by adopting the Attending Physicians Statement as recommended by this Committee, shown attached, and instruct the Council to expedite its printing and distribution immediately.

"The above resolution duly passed and submitted by the Delegates from the Jefferson County Medical Society."

The Reference Committee held long and exhaustive comments on this form and a form submitted by the Campbell-Kenton County Medical Society, a copy of which is attached to the Committee report, and wishes to make the following comments and recommendations.

It is recommended that Resolution D not be accepted and the recommendation of the Insurance Committee not be accepted. One committee member voted in favor of accepting the resolution and the recommendation, but did not wish to make a minority report.

The Reference Committee recommends that the Campbell-Kenton County form be amended to include a blank giving the age of the patient and that line 5 of this form be extended to differentiate between total and partial disability. Your Reference Committee further recommends that a blank be inserted on the face of the form wherein it would be shown whether the illness, injury, or death is covered by Workmen's Compensation.

Finally, your Committee recommends that this form be further amended by the insertion, on the reverse, of an assignment clause, properly worded, whereby the patient could assign to his physician any benefits due him from any third party. These recommendations were approved by a unanimous vote from the Reference Committee.

Mr. Speaker, I move the adoption of this section of the report, as amended.

The motion was seconded and carried that this section of the report, as amended, be adopted.

Report of the Medicare Committee

The report of the Committee on Medicare of the Kentucky State Medical Association gave a summary of the reasons for its being appointed and the actions of the Council and House of Delegates in regard to implementation of the program. It pointed out that three meetings of the committee had been held during the Associational year; that the Chairman had attended a meeting on Medicare immediately after the AMA Clinical Session in Philadelphia and a Medicare Indemnity Plan Conference in Atlanta, Georgia; and that the chairman and a member of the committee had met with Defense Department officials in Washington on June 2 and 3 to negotiate a new Medicare contract for Kentucky. It was stated that at this contract negotiation many inequalities that existed in the previous Medicare contract had been corrected and that after due processing the new Medicare Manual and Schedule of Fees was in the hands of the Blue Shield for printing and distribution. The future of the Medicare program was touched on briefly and it was brought out that due to extensive cuts in the program's financing it was feared the law would be negated. In the Addendum to the Report of the Medicare Committee a summary was given of the meeting on August 8, 1958, in Washington for the purpose of making new changes that must be incorporated in the administration of the Medicare program and the restrictions which were imposed were set forth.

This report was read to the House of Delegates at its first meeting and we are sure that all members are well conversant with its contents. It is noted that the Medicare Program has far exceeded the appropriations made by Congress and the recent publication and distribution of the Medicare contracts have been greatly reduced in coverage and fees.

The Reference Committee wishes to recommend continued efforts toward getting any contracts with the Government on a fee for service basis.

The Reference Committee wishes to commend highly Robert Long, M.D., and Delmas Clardy, M.D., for their work and effort on behalf of the Kentucky State Medical Association.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried that the Report of the Medicare Committee be adopted.

Report of the Committee on Scientific Assembly and Arrangements

The Committee on Scientific Assembly and Arrangements reported that several meetings had been held during the year in order to increase the calibre and number of scientific exhibits; fill all available space for technical exhibits; sponsor color television by Smith, Kline, and French; set up panel discussions; present clinicopathological conference; secure guest speakers; and set up thirteen specialty group meetings. It suggested that the installation of the President be made at the second meeting of the House of Delegates and the Awards presented at the President's Luncheon, which was changed from the Roof Garden to the Crystal Ballroom of the Brown Hotel. An addendum to the Committee's report dealt with the Associate Committee on Postgraduate Medical Education and its recommendation that its committee be reorganized so that the appointments to the committee by the President be for a period of three years and the initial members be staggered; that it be composed of representatives from the Kentucky Chapter of the American College of Physicians, the Kentucky Chapter of the American College of Surgeons, the Kentucky OB-GYN Society, the Kentucky Pediatric Society, the Kentucky Academy of General Practice, and two members at large who are general practitioners. In addition, it was recommended that the Directors of Postgraduate Medical Education for the Universities of Louisville and Kentucky be members. A further recommendation was for additional funds in order that the program might be broadened for the benefit of the members of KSMA.

The Reference Committee wishes to commend this Committee on its excellent program and arrangements for the comfort and convenience of the delegates and members.

This Committee thoroughly approves of the change of the House of Delegates meeting arrangements. We wish to add our thanks to the

Smith, Kline and French Laboratories for their color television programs.

We also wish to commend the Committee on its efforts for better postgraduate medical education.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried that this section of the report be adopted.

Report of the Committee on Allied Professions

The report of the Committee on Allied Professions covered the activities of its associate committees, having held no meeting of its own during the Associational year. Three of its associate committees held meetings. These being, Public Health, School Health and Advisory on Blue Cross.

This report covers the Advisory Committee on Blue Cross, the Dental Committee, the Committee on Hospitals, the Committee on Nurse Training, the Committee on Pharmacy, the Committee on Public Health, and the Committee on School Health. There was very little activity of any of these committees except the Public Health Committee and the Committee on School Health. We wish to commend the Council for its appropriation of $500 for promotional activities of the School Health Program.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried that this section of the report be adopted.

Report of Committee on Professional Relations

The report of the Committee on Professional Relations stated that there had not arisen the necessity for calling a meeting of this committee during the past year because complaints presented had been minor and had been resolved by correspondence. It commended the county medical societies for having arbitration committees and felt they were doing an outstanding job of taking care of their local needs.

There has been no call for a meeting of this Committee during the year. The complaints to the Committee have been minor and have been resolved by correspondence.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried that this section of the report be adopted.

Mr. Speaker, I move the adoption of the report of Reference Committee No. 2 as a whole, as amended.

The motion was seconded and carried that the report of Reference Committee No. 2, as a whole and amended, be adopted. The Chairman expressed his appreciation to the members of his Committee for their assistance.

Signing the report of Reference Committee No. 2 were: Thomas O. Meredith, M.D., Harrodsburg, Chairman; F. Hays Threlkel, M.D., Owensboro, Vice Chairman; Marc Reardon, M.D., Covington; Gladys L. Rouse, M.D., Florence; Robert S. Tillett, M.D., Louisville.

REFERENCE COMMITTEE NO. 3

Carl H. Fortune, M.D., Chairman
Reports on Legislation and Public Relations

Report of the Committee on Public Information and Service

The Committee on Public Information and Service reported that it held one meeting during the past year at which time it considered the Council's directive to acquaint the public and the medical profession on the advantages of the private practice of medicine and the disadvantages of third party medicine, in which directive it concurred. It also recommended that a journalist be employed to assist in this informational program and a bill guaranteeing free choice of physician be prepared and introduced into the State Legislature. Another recommendation set forth in this report had to do with the American Association of Physicians and Surgeons Essay contest. Pertinent facts about the indoctrination booklet, news capsules, Senior Day program, exhibit at State Fair, and AMA radio transcriptions were presented.

This Committee recommended to the Council that certain measures be taken to acquaint the public with the disadvantages of third party medicine and that a bill guaranteeing free choice of physician be prepared and introduced in the State Legislature. It is also recommended that the Council consider an annual essay contest under the sponsorship of the American Association of Physicians and Surgeons. These recommendations were acted upon by the Council and require no further action at this time.

The Committee should be commended for its excellent work in distributing news to the physicians of the State through the *NEWS CAPSULES*. The distribution of indoctrination booklets, "KSMA Benefits" and "AMA In Action" is highly desirable and it is recommended that the practice be continued.

Special commendation is due the Committee for the fourth annual Senior Day program and it is recommended that this be continued. The Committee is also commended for the exhibit at the State Fair and for the increased use of radio transcriptions prepared by the American Medical Association.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried that this section of the report be adopted.

Report of the Committee on Legislation

Due to the thoroughness with which the Reference Committee reported on this Committee on Legislation, a summary of its report would be a duplication.

On March 27, 1958, the Council of the Kentucky State Medical Association decided that the Legislative Committee should have two chairmen, one for state affairs and one for national affairs. Since the Legislature was in session this year, the Committee was very busy. The most controversial bill, namely Senate Bill 208, concerned with free choice of physician, passed the Senate by a vote of twenty-nine to six, but died in the House Rules Committee. The Legislative Committee is to be congratulated for the excellent work which they did and

it seems quite certain that had the Bill been allowed to reach the floor of the House, it would have passed.

A Commission to study Medical Care Plans was authorized by a resolution passed by the House and has been appointed by the Governor.

Senate Bill 104 concerning Medical Care for Indigent Persons was allowed to die in the Rules Committee because of undesirable amendments. A number of other Bills in which the Association was interested were passed and some to which the Association was opposed were defeated.

The Committee deserves the thanks of the entire Association for its excellent work in Frankfort.

On a national level, the Committee was concerned with opposition of the Forand Bill which failed of passage. The Committee was also active in combating undesirable changes in the Medicare program and it supported the Jenkins-Keogh Bill.

Special attention is called to a recommendation of the Committee that all physicians express appreciation to Legislators and Congressmen when they vote in a manner favorable to organized medicine.

The Committee also recommended that an individual be employed who would devote a major portion of his time to working on legislative matters. It is felt this would be highly desirable, but that the implementation of this recommendation would depend upon the action of the House of Delegates in the matter of increasing dues to the KSMA. Should such an individual be employed, it may be possible to keep physicians better informed concerning the voting record of their Congressmen and Legislators.

The Legislative Committee should be especially commended for the time and effort which they have expended and for the results obtained. Physicians of the State are urged to cooperate fully with the work of this important Committee.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried that this section of the report be adopted.

Report of the Committee on Labor-Management Health Plans

The Labor-Management Health Plans Committee reported no meetings held during the year and recommended, at the request of its Associate Advisory Committee to the UMWA, that said Advisory Committee be disbanded.

This Committee held no meeting during the year because nothing was referred to it for action.

It was recommended that the Sub-committee, the KSMA Advisory Committee to the UMWA Welfare and Retirement Fund, be disbanded. It is felt that any matters needing to be considered by this Committee can be referred to the Committee on Labor-Management Health Plans and we accordingly concur with this recommendation.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried that this section of the report be adopted.

Resolution F—AAGP Representation on the Joint Commission on Accreditation of Hospitals

"WHEREAS, the Joint Commission on Accreditation of Hospitals is the recognized body for inspection of hospitals for the purpose of evaluating hospital medical care, and

"WHEREAS, the present membership of this commission is composed of the following organizations: The American College of Surgeons, The American College of Physicians, The American Hospital Association, The American Medical Association, The Canadian Medical Association, and

"WHEREAS, it has been announced that the Canadian Medical Association will withdraw from membership in the Joint Commission as of January 1, 1959, and

"WHEREAS, the American Academy of General Practice is the established organization of over 24,000 members representing the general physicians of this country, and

"WHEREAS, the Congress of Delegates of the AAGP in convention assembled did vote to seek membership on the Joint Commission for Accreditation of Hospitals at the annual meeting in Dallas, Texas, therefore,

"BE IT RESOLVED that this House of Delegates of the Kentucky State Medical Association, as did the House of Delegates of the Minnesota State Medical Association, support the American Academy of General Practice in its efforts to gain membership on the Joint Commission for Accreditation of Hospitals filling the vacancy created by withdrawal of the Canadian Medical Association and so instruct its two delegates to the House of Delegates of the American Medical Association."

Resolution F was introduced by the Jefferson County Medical Society and approved unanimously by the Jefferson County delegates.

Resolution F is concerned with representatives from the American Academy of General Practice on the Joint Commission on the Accreditation of Hospitals. It is felt that since the American Academy of General Practice represents over twenty-four thousand members doing General Practice in the hospitals of the country, that this request is justifiable.

Mr. Speaker, I move the adoption of this section of the report.

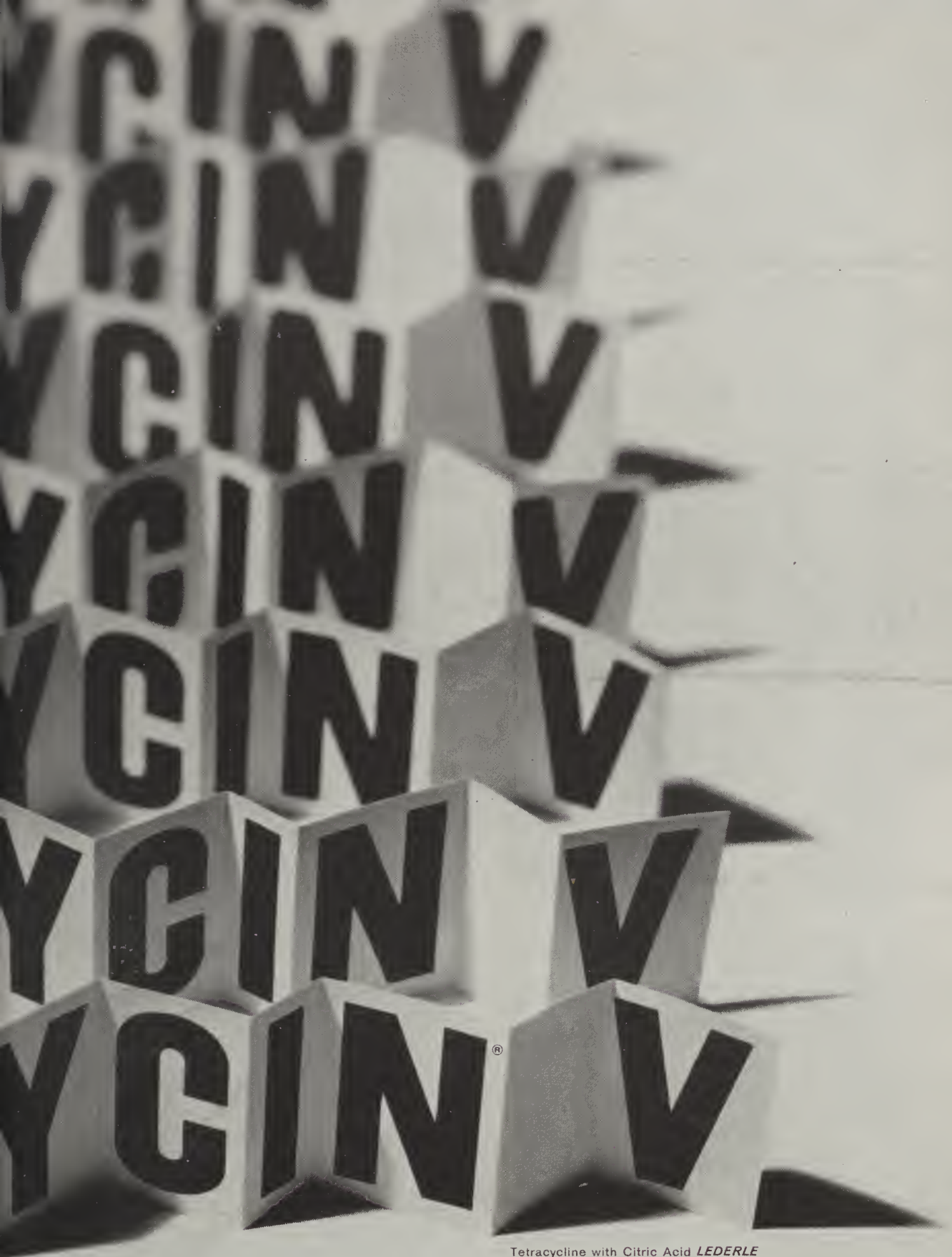
The motion was seconded and carried that Resolution F be adopted.

Correspondence from Taylor County

A letter to the House of Delegates from the Taylor County Medical Society, explaining a local situation concerning a physician, requested that this matter be studied by the House of Delegates.

This communication is concerned with a physician practicing in Taylor County, not a member of the Taylor County Medical Society, allegedly engaged in unethical practices. The Taylor County Medical Society feels that adequate support has not been given by (a) federal officials, (b) the Kentucky State Medical


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Association, and (c) the State Board of Health. They request consideration by the House of Delegates.

It is recommended that the Taylor County Medical Society be commended for their interest and activity toward eliminating undesirable practices in their community. It is further recommended that the House of Delegates instruct the Council to consider this problem. It is requested that the Taylor County Medical Society present to the Council such information as it has in hand so that proper action can be taken.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried that this section of the report be adopted.

Mr. Speaker, I move the adoption of the report of Reference Committee No. 3 as a whole.

The motion was seconded and carried that the report of Reference Committee No. 3 as a whole be adopted. The Chairman thanked the members of his Committee for their assistance.

Signing the report of Reference Committee No. 3 were: Carl H. Fortune, M.D., Lexington, Chairman; J. T. Giannini, M.D., Louisville, Vice Chairman; W. H. Barnard, M.D., Elizabethtown; H. F. Chambers, M.D., Campbellsville; R. L. Houston, Jr., M.D., Eminence.

REFERENCE COMMITTEE NO. 4

Robert S. Dyer, M.D., Chairman

Reports on Miscellaneous Business

Report of Committee to Study the Constitution and Bylaws

The report of the Committee to Study the Constitution and Bylaws sets forth changes as recommended by it.*

Chapter I, Section 1. The proposed change in this section having to do with transfer members was approved.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried that this section of the report be adopted.

Chapter III. This section on "General Meeting," changed to implement the decision of the House of Delegates in 1957, was approved.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried that this section of the report be adopted.

Chapter IV, Section 8. This section of the report was redone by the Bylaws Committee for clarification and legal terminology, and was approved.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried that this section of the report be adopted.

Chapter VI, Section 2. In view of changes made by the 1957 House of Delegates it was felt the President Elect should be an ex officio member of the Committee on Scientific Assembly and Arrangements with the right to vote and this was approved.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried that this section of the report be adopted.

Chapter VI, Sections 6 and 7. Revision of these sections as to their numerical listing was approved, as set forth in the report.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried that this section of the report be adopted.

Chapter VII, Section 1. The quorum of the Council and the Executive Committee as recommended by the Bylaws Committee was approved.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried that this section of the report be adopted.

Chapter VII, Section 9. This section giving the Council freedom of choice in the selection of a district councilor to fill a vacancy was approved.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried that this section of the report be adopted.

Study of Committee and Organizational Structure. A study of the committee and organizational structure of KSMA as patterned after the AMA and recommended by the 1956-57 president was approved.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried that this section of the report be adopted.

Model County Society Bylaws. The recommendation that the 1958 House of Delegates be requested to give authority to the Bylaw Committee to revise the model county society bylaws, with the assistance of counsel for the Association, was approved.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried that this section of the report be adopted.

Chapter X. This change concerning the "Rules of Conduct" stating that the "Principles of Ethics of the American Medical Association, together with the Constitution and Bylaws of the Association and all duly adopted resolutions of the House of Delegates shall govern the conduct of members" and so forth, was approved.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried that this section of the report be adopted.

**The Constitution and Bylaws, as amended by the 1958 Session of the House of Delegates will be found on page of this issue.*

Addendum to the Report of the Committee to Study the Constitution and Bylaws. Chapter IX, Section 1. This section of the report recommending that Chapter IX, Section 1 be amended by striking out the figure of $35 in line 3 immediately after the words "Active Members," and inserting in its place the figure of $50, thus increasing the dues of active members by $15, for the purpose of postgraduate medical education, medical legislation, Kentucky Physicians Placement Service, and Rural Kentucky Medical Scholarship Fund, was approved.

Mr. Speaker, I move the adoption of this section of the report.

After a thorough and lengthy discussion, the motion was seconded and carried that this section of the report be adopted.

Mr. Speaker, I move the adoption of the report of the Committee to Study the Constitution and Bylaws as a whole.

The motion was seconded and carried that the report of the Committee to Study the Constitution and Bylaws be adopted.

Report of the Committee on the Corporate Practice of Medicine

The Committee on the Corporate Practice of Medicine held no meeting during the year.

The Committee on the Corporate Practice of Medicine held no meeting and its report was approved.

Mr. Speaker, I move the adoption of this report.

The motion was seconded and carried that the report of the Committee on the Corporate Practice of Medicine be adopted.

Report of the Advisory Committee to Selective Service

The report of the Advisory Committee to Selective Service narrated briefly the activities in Washington concerning the doctor draft and pointed out that in Kentucky the committee has not found it necessary to call or even investigate many physicians for service. It recommended that Russell E. Teague, M.D., Commissioner of Health for Kentucky, be named a member of this Committee.

The recommendation of adding the name of the Kentucky Commissioner of Health, namely, Russell E. Teague, M.D., as a member of the Committee, was approved.

Mr. Speaker, I move the adoption of this report.

The motion was seconded and carried that the report of the Advisory Committee to Selective Service be adopted.

Proposed Constitution Change—Report No. 36

This report is in connection with two resolutions adopted at the 1957 session of the House of Delegates upon their first reading, seeking to change Articles V and VIII of the Constitution of KSMA. The Speaker of the House sent copies to all county medical society secretaries in Kentucky on May 8, 1958, thus fulfilling the provisions of Article XII of the Constitution. These resolutions are brought up for final disposition at this time.

Resolution C, submitted at the 1957 meeting, amending Article V, Section 2 of the Constitution allowing alternate delegates to the AMA a vote in the House of Delegates of the KSMA, was approved.

Mr. Speaker, I move the adoption of this section of the report and the adoption of this constitutional amendment.

The motion was seconded and carried that this section of the report be adopted.

Resolution B, submitted at the 1957 meeting, amending Article VIII, Section 1 of the Constitution allowing at least one councilor or more from each councilor district on the Council of KSMA was approved. The Reference Committee felt that the approval of this amendment would allow proper redistribution of councilors on a proportionate basis to be passed in one year as a bylaw instead of requiring two years as a constitutional amendment.

Mr. Speaker, I move the adoption of this section of the report.

After lengthy and general discussion the motion was seconded and upon roll call vote the resolution amending Article VIII, Section 1 of the Constitution was not adopted.

Mr. Speaker I move the adoption of the Constitution Changes B and C as a whole, as amended.

The motion was seconded and carried that the Constitution Changes, as amended, be adopted.

Resolution A

"WHEREAS, at its meeting at 12.30 P.M. on Monday afternoon September 22, 1958, the Council adopted the following resolution:

"RESOLVED that the Council recommend to the House of Delegates that Sections 6 and 7 of Chapter XII of the Bylaws of KSMA be deleted in their entirety, and that said recommendation be offered in the form of an amendment to the Bylaws at its first session tonight."

This resolution was introduced by the Council of KSMA concerning Bylaw changes by deleting Sections 6 and 7 of Chapter XII and was not approved. It was the opinon of this committee that deletion of these sections did not solve the problems incurred which brought about this action, and furthermore did not feel the personal right of any physician for appeal should be jeopardized.

Mr. Speaker, I move that Resolution A be not approved, and that the Bylaws Committee be instructed to study this problem with the intent and purpose of this Resolution in mind and report to the Annual Session of the House of Delegates in 1959.

The motion was seconded and carried that Resolution A not be adopted.

Resolution C—Bylaw Change—Ohio County Medical Society

"WHEREAS, it is becoming increasingly obvious that no organization dedicated to the practice of high quality medicine can ignore the effects of third party intervention in the private practice of medicine, and

"WHEREAS, such intervention will adversely affect the quality of medicine practiced, and

"WHEREAS, the patient's free choice of physician is necessary to implement the practice of high quality medicine, and

"WHEREAS, labor bosses are now attempting to gain control of the practice of medicine which, if accomplished will destroy the private practice of medicine and lead to inferior medical care, now therefore

"BE IT RESOLVED that the House of Delegates of the Kentucky State Medical Association specifically instruct the Committee on the Constitution and Bylaws to draw up an amendment on the membership requirements expressing unalterable opposition to any and all medical plans which (1) deny the patient free choice of physician; (2) fix the fee of the physician in any manner except that of fee for service basis; (3) lowers the standard of care rendered; and (4) force a line of treatment not designated by the physician and agreed to by the patient, and

"BE IT FURTHER RESOLVED, that the House of Delegates of KSMA instruct the Committee to draw up an amendment making any physician who engages in such practice ineligible for membership in the KSMA."

This resolution was introduced by the Ohio County Medical Society and instructs the Bylaws Committee to study and draw up an amendment of membership requirements as expressed in this resolution. It was approved. This Reference Committee agrees with the intent and purpose of this resolution and recommends its study and appropriate action by the Bylaws Committee.

Mr. Speaker, I move the adoption of Resolution C.

The motion was seconded.

The Chairman of the Council of KSMA, at this point, offered the following substitute recommendation for the disposition of Resolution C and the Reference Committee's report on it

"RESOLVED, that the Council recommend to the House of Delegates, as a substitute for that part of the report of Reference Committee Number 4 which relates to the Ohio County Resolution C, that this resolution be referred to the newly-formed Committee on Third Party Medicine, composed of the four immediate, active, past presidents and the Chairman of the Council, for study and appropriate action."

Mr. Speaker, I move the adoption of this recommendation in connection with Resolution C.

The recommendation of the Council as to the disposition of Resolution C was debated at some length. The Speaker explained that if the recommendation of the Council, offered as a substitute for the Reference Committee's recommendation as to the disposition of Resolution C, passed, it would automatically defeat the Reference Committee's recommendation. The Speaker also pointed out that if the Council's recommendation passed, Resolution C would be adopted with the Council's recommendation of its disposition.

The motion was seconded and carried that Resolution C be referred to the Committee on Third Party Medicine.

Resolution E

Resolution E designed to implement the Constitutional Amendment of Article VIII, Section 1 of the KSMA Constitution allowing at least one councilor or more from each councilor district on the Council of KSMA, was automatically dead due to the defeat of the Constitutional Amendment, which was Resolution B of the 1957 meeting.

Mr. Speaker, I move the adoption of the Report of Reference Committee No. 4 as a whole, as amended.

The motion was seconded and carried that the report of Reference Committee No. 4 as a whole, as amended, be adopted. The Chairman thanked the members of his committee for their assistance.

Signing the report of Reference Committee No. 4 were: Robert S. Dyer, M.D., Louisville, Chairman; Fred Cecil, M.D., Horse Cave, Vice Chairman; C. Walker Air, M.D., Ludlow; Albert Joslin, M.D., Beaver Dam; Max D. Klein, M.D., Shelbyville.

REFERENCE COMMITTEE NO. 5

O. Leon Higdon, M.D., Chairman
Miscellaneous Business

Report of the Medico-Legal Administrator

The Medico-Legal Administrator reported that few cases had been referred to him on the subject of professional liability which inferred that the State of Kentucky is relatively free of malpractice claims. He extended such help as possible to those who chose to call on him.

Your Committee wishes to accept the report of the Medico-Legal Administrator in its entirety. In addition we should like to stress the value of additional education of the membership of KSMA as to the aid which is readily available to any member in legal distress. We should also like to point out that the closest cooperation should exist between the hospital, the insurance carrier, and the physician when a legal problem presents itself.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried that this section of the report be adopted.

Report of Committee to Study Relations with Voluntary Health Groups

The Committee to Study Relations with Voluntary Health Groups reported that the Chairmen of the Associate Committees had been contacted and there were no problems brought to them during 1957-58.

This report of the Committee to Study Relations with Voluntary Health Groups is accepted in its entirety.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried that the report of this Committee be adopted.

Resolution B
National Voluntary Health Agencies

"WHEREAS, a major contribution has been made to medical research by our national voluntary health agencies, and

"WHEREAS, the objectives of the principal volun-

tary health agencies are desirable (a) for furtherance of research and (b) public health education, and

"WHEREAS, it is firmly believed that the continued use of these organizations for their established purposes is wholly dependent upon retaining their identities and independence. Now therefore, be it

"RESOLVED that this House of Delegates of KSMA commend these groups on the splendid contribution they have made to the health of the people of Kentucky, and be it further

"RESOLVED, that this House of Delegates approve and support the position as voiced by the AMA House of Delegates that the legitimate national voluntary health agencies not be required to change their present modus operandi in raising funds and employing these funds in the carrying out of the research."

This resolution was introduced by the Council of KSMA.

This report deals with the same subject matter as the preceding report and for that reason shall not be presented.

Resolution B is accepted in its entirety. The Committee should like to point out that at the local level physicians will do well to interest themselves in the activities of these various lay groups and to not only be available for advice relating to their problems, but to also serve on the various committees in an active capacity.

In this manner, the interest of the public and the medical profession shall be safeguarded. We are all aware of the manifold potential abuses in these programs.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried that the Council Resolution B be adopted.

Report of the McDowell Home Committee

The report of the McDowell Home Committee pointed out that the McDowell Home should now take its place as one of the important historic shrines in the country and since the last year's report approximately 1300 adults and 250 children had visited the Home. A statement of receipts and expenses was submitted.

This report is that of the McDowell Home Committee. We wish to thank Doctor Vance for his continued interest and personal sacrifice in the execution of the activities of this committee. The report is accepted in its entirety.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried that the McDowell Home Committee report be accepted.

Report of Representative to Conference of Presidents and Other Officers of State Medical Associations

The report stated that an excellent program was presented at the Conference held June 22 in San Francisco, and incoming president, E. L. Bernhart, M.D., delivered an address on the responsibilities of the profession in legislative matters. It pointed out that this Conference offers much in the field of socio-economic medicine.

The report is accepted in its entirety.

Mr. Speaker, I move the adoption of this section of the report

Report of the Board of Directors of Kentucky Physicians Mutual, Inc.

Due to the complete coverage given in the Reference Committee's report, a summary of the Board of Directors of the Kentucky Physicians Mutual report would be a duplication.

The report of the Board of Directors of the Kentucky Physicians Mutual, Inc., to this House of Delegates is most interesting and is deserving of study by each member of the Kentucky State Medical Association. I should like to point out that nine years ago this Blue Shield Plan had an unchartered course to follow. Its future was underwritten by a number of our members interested in the physical welfare of the people of Kentucky. That first year the plan paid $60,000 to Kentucky physicians. In the year 1957 Blue Shield paid $4,134,244 to the physicians of Kentucky. In the first six months of 1958 Blue Shield has paid $2,354,589 to our doctors. Total payments for 1958 will exceed those for 1957 by $500,000.

Dues income received from subscribers in the calendar year of 1958 will exceed $5,000,000 for the *FIRST* time since the plan began operations.

Your Blue Shield Plan continues to maintain a low operating cost. Only 4 of the 80 Blue Shield Plans in the nation have a lower operating cost per member than our Kentucky Plan. Much of the credit for this efficiency must be given to our paid administrative staff. Your officers and directors receive no salary.

In 1957, Blue Shield sustained a net loss of $40,737 and for the first seven months of 1958 shows a net loss of $53,533. These losses have not impaired our financial soundness. This can be attributed primarily to increasing utilization. Some of this utilization is unwarranted, and your cooperation in controlling this abuse will be a real service to both physicians and subscribers.

One item of particular concern is diagnostic procedures which can become uncontrollable statistically and technically are not included in our contract without a rider for same.

Our association with the Blue Cross continues to be a mutually satisfactory contract. During the past year, a joint committee of members from each Board of Directors was rejuvenated for the study of broad policies affecting both organizations.

Addendum No. 1 is a request of the Board of Directors of Blue Shield for appointment of a Blue Shield Advisory Committee from the membership of KSMA to study these prob-

lems of prepaid medical and surgical insurance.

The extent in scope of this committee will be far reaching and the members must be medical philosophers as well as practical visionaries; they must be men of sound judgment and with a keen sense of responsibility.

The Committee must of necessity be a large one representing every facet of the practice of medicine in the state of Kentucky. These men will bring to the Board of Directors of Blue Shield the feelings of their respective groups as to the scope of Blue Shield and the range of coverage desired. They in turn will then be informed as to the actuarial feasibility of accepting or rejecting their suggestions and recommendations, so that The group which they represent may be fully informed as to the reasons for the actions of the Board of Directors of Blue Shield.

The Committee as a whole must be prepared to think objectively with the future philosophy of prepaid insurance coverage of Kentucky's medical population relative to increasing age in the population together with the concomitant change of economic resources in order to forestall government interference in the care of the aged in our population. It must likewise be prepared to inform the Board of Directors of Blue Shield as to the overall philosophy of the profession as to the coverage desired, within the limits of actuarial soundness.

The problems of this Committee which must be considered and decided upon will be many and varied; the results accomplished will be directly proportionate to the calibre of the men appointed and the extent to which they go in discharging their responsibilities with clarity of vision, sound judgment and charitable philosophy.

Addendum No. 2. The Board of Directors of Kentucky Physicians Mutual, Inc., recommends that the county medical societies or councilor districts be encouraged to request staff speakers from administrative personnel and offices of the Kentucky Physicians Mutual to speak to their groups regarding the importance of the problems of Blue Shield in Kentucky.

We realize there are imperfections in the operation of Kentucky Physicians Mutual, Inc., and because of that realization this committee will continue to try to improve the usefulness of the plan to physician and participants alike. We know of no better public relation bond. Certainly there is no comparison between the availability of medical care for the public and reasonable financial remuneration for the physician in the present recession and that in previous ones when there were no prepayment health plans.

Mr. Speaker I move the adoption of this section of the report.

The motion was seconded and carried that the report of the Board of Directors of the Kentucky Physicians Mutual, Inc., be adopted.

Mr. Speaker, I move the adoption of the report of Reference Committee No. 5 as a whole.

The motion was seconded and carried that the report of Reference Committee No. 5 as a whole be adopted. The Chairman then thanked the members of his Committee for their cooperation.

Members signing the report of Reference Committee No. 5 were: O. Leon Higdon, M.D., Paducah, Chairman; Millard C. Loy, M.D., Columbia, Vice Chairman; T. R. Bryant, M.D., Lexington, Richard J. Rust, M.D., Newport; L. H. Segerberg, M.D., Louisville.

REFERENCE COMMITTEE NO. 6

Blaine Lewis, Jr., M.D., Chairman

Reports of Miscellaneous Business

Report of the Advisory Committee to the Editor

The report of the Advisory Committee to the Editor stated that several meetings had been held and various problems of format and business of The Journal had been satisfactorily solved. It urged the members of the KSMA to send in articles for publication in The Journal that would show the nation that Kentucky medicine is progressive. Appreciation was expressed at having the good fortune to have Doctor Guy Aud serve so long as editor, and regret at his enforced retirement due to illness. It stated that The Journal will miss a capable editor and a good friend, and extended its support and help to the new editor, Sam A. Overstreet, M.D., and his associate editor, George W. Pedigo, M.D.

The report of the Advisory Committee to the Editor was approved. Our Committee would like to emphasize the fact that this Committee would like more of our members of the Kentucky State Medical Association to contribute articles for our State Journal. The Reference Committee joins with the Advisory and wishes Doctor Guy Aud luck and extends our welcome to the new editor, Doctor Sam Overstreet, and the new associate editor, Doctor George W. Pedigo.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried that the report of the Advisory Committee to the Editor be adopted.

Report of the Committee on Emergency Medical Service

This report stated that no formal meetings were held during the year due to the fact that planning of catastrophic medical services had been taken over by the Federal Civil Defense Department, which has supplied the five mobile support areas with publications for use by members of the medical sections of these areas. It pointed out that the AMA has published articles on this subject, but that responsibility for local disaster planning remained with the county societies.

A report of the Committee on Emergency Medical Service was discussed and it was emphasized that any program for emergency service should be planned on a local county society level.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried that this section of the report be adopted.

Report of Advisory Committee to the Woman's Auxiliary

The report stated that a meeting was had with the Woman's Auxiliary in regard to future planning and the chairman was asked to be a member of the Awards Committee for the Health Citation. This report recommended that the Kentucky State Medical Association invite the chairmen of the various committees of the Woman's Auxiliary to the meetings of the committees of the KSMA.

The report of the Advisory Committee to the Woman's Auxiliary was read.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried that this section of the report be adopted.

Report of Committee on Medical Services

The Committee on Medical Services report consisted of individual brief reports of each of its fourteen associate committees. These facts were pointed out: that all doctors continue to sponsor the Diabetes Detection Drive; that more members should attend the annual Kentucky Food Conference; that the Maternal and Infant Mortality Committee be enlarged to give broader state coverage; and that BCG vaccine should not be used. It also stated that it would be profitable and appropriate if the chairman of the Medical Service Committee was invited to meet with the associate committees.

The Committee on Medical Services was thoroughly studied with an addendum. This report concerns 14 committees which includes briefly the Blood Bank, Cancer, Cerebral Palsy, Crippled Children, Diabetes, Diatetics, General Practice, Geriatrics, Industrial Medicine, Infant and Maternal, Mental Hygiene, Pediatrics, Physical Therapy, and Tuberculosis. The Geriatrics Committee recommendations were that efforts should be made to have a representative of this committee appointed to the Governor's Commission on Aging and supply material to the Commission for its consideration. The Physical Therapy Committee and addendum report recommends that the Committee on Physical Medicine and Rehabilitation have added to its roster, representative numbers from the specialty groups recognized by the Kentucky State Medical Association and a member from the Kentucky Academy of General Practice; that this committee meet with Doctor Leonard in working up a practical fee schedule and report to the Council this schedule setup before the end of this fiscal year. To the recommendations concerning the total report were that all doctors continue to sponsor the Diabetes Detection Drive, that more members attend the Kentucky Annual Food Conference, that the Maternal and Infant Mortality Committee be increased in numbers to give broader state coverage; and that BCG vaccine should not be used.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried that this section of the report be adopted.

Report of the KSMA Advisor to the University of Louisville Student AMA Chapter

The report of the Advisor stated that no activity of any type was requested.

The report of the KSMA Adviser to the University of Louisville Student AMA Chapter was noted to be very brief. This Committee recommends that the Advisor should meet with the Louisville Student AMA Chapter at least once a year and discuss the history and function of the AMA and the KSMA with the members of the Chapter.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried that this section of the report be adopted.

Report of the Woman's Auxiliary to the Kentucky State Medical Association

The Woman's Auxiliary to the Kentucky State Medical Association reported that it had just completed its thirty-fifth year in existence. Among programs and projects of the Auxiliary were the following: sale of Xmas cards for the American Medical Education Foundation; increase in subscriptions of Today's Health; working closely with civic organizations on community health problems; keeping informed on the status of legislation; addition of fifty new members; observance of Doctor's Day; publication of Blue Grass News; and working with KSMA on special projects such as Senior Day, McDowell Home and County Society Officers Conference.

The report of the Woman's Auxiliary to the KSMA was read with interest and we would like to note that the Auxiliary has been very active in the past year. The Committee recommends that the Secretary of the State Medical Association be instructed to write a letter of commendation to the President, Mrs. J. Andrew Bowen of the Woman's Auxiliary of the KSMA for the excellent work that they have done in the past.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried that this section of the report be adopted.

Mr. Speaker, I move the adoption of the Report of Reference Committee No. 6 as a whole.

The motion was seconded and carried that the Report of Reference Committee No. 6 as

a whole be adopted. The Chairman thanked his committee members for their assistance and cooperation.

Members signing the report of Reference Committee No. 6 were: Blaine Lewis, M.D., Louisville, Chairman; Douglas H. Jenkins, M.D., Richmond, Vice Chairman; Theodore L. Adams, M.D., Lexington; Harold Keen, M.D., Bowling Green; Frederick R. Scroggin, M.D., Dry Ridge.

REFERENCE COMMITTEE NO. 7

Lillard F. Beasley, M.D., Chairman

Reports on Miscellaneous Business

Report of Committee on Physicians Placement Service

The report of the Committee on Physicians Placement Service pointed out that its operations were set up in 1953 and its business is transacted at the Headquarters Office by form letters and up-to-date listings of physicians wanting locations and communities wanting physicians. No special meeting of this committee has been called this year, and there have been 103 inquiries made at the Headquarters office.

The Reference Committee has studied the report of this Committee and notes with pleasure that the Physicians Placement Service Committee is still active through the central office and is keeping a list on file of available physicians and locations that are in need of doctors.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried that this section of the report be adopted.

Report of the Committee on Rural Health

The Committee on Rural Health reported that it had been busy making plans for the seventh Kentucky Rural Health Conference in conjunction with the Kentucky Rural Health Council, and has had three meetings since the 1957 session of the House. All members were urged to attend the Seventh Annual Kentucky Rural Health Conference which will be held December 4, 1958 at the Kentucky Hotel in Louisville.

The Reference Committee has studied this report and wishes to compliment the Committee on Rural Health for the many activities during the past year. The Reference Committee wishes to endorse the subjects as formulated for study at the coming Rural Health Conference.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried that this section of the report be adopted.

Report of KSMA Representatives on Joint Commission for Improvement of Patient Care

The report stated that one meeting had been held but nothing of importance had evolved to date.

The Reference Committee has studied this report and feels that the report is singularly lacking in details. A meeting was held, but no report was made of the problems discussed. It is recommended that in the future the problems undertaken and solutions attempted be listed.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried that this section of the report be adopted.

Report of the Rural Kentucky Medical Scholarship Fund

The report of the Rural Kentucky Medical Scholarship Fund pointed out the following facts: all previous records were broken in the number of loans granted at the meeting of the Board of Trustees on May 22, being 28; 68 students will be attending medical schools in 1958-59 who are receiving or have received loans; 82 students have graduated from medical schools, having received help from the Fund; and the Board of Trustees is well pleased with the statewide distribution of rural scholarship physicians in general. Ten needy counties were designated as Jackson, McGoffin, Martin, Elliott, Knott, Breathitt, Leslie, Knox, Powell, and Cumberland. It was stated that the 1958 Legislature set aside $50,000 for the next biennium to be used by the Fund.

The Reference Committee has studied the report of the Rural Kentucky Medical Scholarship Fund and wishes to compliment this Committee for the success of their efforts. It is noted that the Committee was successful in obtaining an appropriation of $50,000 from the Legislature for carrying on this program. It is noted that the number of recipients from this Fund has increased yearly and undoubtedly in a few years the results of their efforts will be seen.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried that this section of the report be adopted.

Suggested Bylaws of the Kentucky Health Council

The suggested bylaws of the Kentucky Health Council consisted of Articles I through VIII, covering name, object, membership, officers, sessions and meetings, committees, funds, and amendments.

The Reference Committee has studied the suggested bylaws for the Kentucky Health Council. Since at this time objectives and purposes of this proposed Health Council are not clearly stated, and since it is believed that a period of study will clear up many parts not now understood, the Reference Committee recommends that this proposal be studied for at least another year before we take any action.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried that this section of the report be adopted.

Mr. Speaker, I move the adoption of Reference Committee No. 7's report as a whole.

The motion was seconded and carried that this report of Reference Committee No. 7 as a

whole be adopted. The Chairman thanked the members of his Committee for their assistance.

Signing the report of Reference Committee No. 7 were: Lillard F. Beasley, M.D., Franklin, Chairman; Carl Cooper, Jr., M.D., Bedford, Vice Chairman; L. Douglas Atherton, M.D., Louisville; N. L. Bosworth, M.D., Lexington; Paul F. Maddox, M.D., Campton.

Unfinished Business

The Speaker called for any unfinished business to be presented at this time and there was none.

Election of Officers

The Nominating Committee submitted one nominee for each office, and after motions were duly made, seconded and carried, the following officers were elected:

President Elect	Irvin Abell, Jr., M.D., Louisville
Vice Presidents:	
Central District	Marvin A. Lucas, M.D., Louisville
Eastern District	Thomas O. Meredith, M.D., Harrodsburg
Western District	Lillard F. Beasley, M.D., Franklin
Secretary	Woodford B. Troutman, M.D., Louisville
Treasurer	Delmas M. Clardy, M.D., Hopkinsville
Delegate to AMA	Robert C. Long, M.D., Louisville
Alternate Delegate to AMA	George P. Archer, M.D., Prestonsburg

Election of Councilors

The Nominating Committee then presented nominees for the Districts which were to elect councilors, which Districts had previously met and submitted the names to the Nominating Committee, and the following were duly elected by the vote of the full House of Delegates:

Second District	Walter L. O'Nan, M.D., Henderson
Seventh District	C. Wyatt Norvell, M.D., New Castle
Ninth District	J. M. Stevenson, M.D., Brooksville
Tenth District	Richard G. Elliott, M.D., Lexington
Thirteenth District	Charles B. Johnson, M.D., Russell

Election of 1959 Nominating Committee

The Nominating Committee to serve at the 1959 Annual Meeting was duly elected as follows:

James W. Archer, M.D., Paintsville
Joe M. Bush, M.D., Mt. Sterling
Wendell V. Lyon, M.D., Ashland
J. B. Marshall, M.D., Louisville
Gaithel L. Simpson, M.D., Greenville

Nominations for Board of Directors Kentucky Physicians Mutual, Inc.

The following list of nominees was submitted for vacancies on the Board of Directors of the Kentucky Physicians Mutual, Inc., by the Board of Directors of the Kentucky Physicians Mutual, Inc.:

Robert Bateman, M.D., Danville
Branham B. Baughman, M.D., Frankfort
A. L. Cooper, M.D., Somerset
J. B. Lukins, M.D., Louisville
W. K. Massie, M.D., Lexington
W. Vinson Pierce, M.D., Covington
Ed Rankin, M.D., Lexington
Charles B. Stacy, M.D., Pineville
Russell E. Teague, M.D., Louisville
Hays Threlkel, M.D., Owensboro
L. O. Toomey, M.D., Bowling Green
R. W. Robertson, M.D., Paducah

The following list of nominees for the vacancies on the Board of Directors of the Kentucky Physicians Mutual, Inc., were submitted by the Nominating Committee of KSMA:

Charles G. Bryant, M.D., Louisville
Ralph M. Denham, M.D., Louisville
Mitchell B. Denham, M.D., Maysville
Frank L. Duncan, M.D., Monticello
Howard I. Frisbie, M.D., Stanford
Robert L. Sumner, M.D., Henderson
Carroll L. Witten, M.D., Louisville
A. O. Miller, M.D., Louisville

Motions were made, seconded and carried that these lists above be submitted to the Board of Directors of the Kentucky Physicians Mutual, Inc.

The Speaker asked for the pleasure of the House of Delegates as to where it would meet in 1959, and it was taken by unanimous acclaim that the 1959 House of Delegates be held in the Roof Garden of the Brown Hotel.

At this point the new president, Robert W. Robertson, M.D., Paducah, was installed in office with administration of the Oath of Office by the Chairman of the Council, and the president's first official act was to present the retiring president with the past president's key.

There being no further business, a motion was made, seconded and carried that the 1958 meeting of the House of Delegates adjourn at 10:40 P.M.

SPECIAL ARTICLES

"It Can Be You"

EDWARD B. MERSCH, M.D.
1957-58 KSMA President
Covington, Ky.

HISTORY is more than the recorded pages of dry facts about the people and lands in which they lived. It is the happenings of the people, their reactions to given pressures of all kinds, both singly and collectively, at the time in which they are living. And history is more or less the repetition of these problems. The immediate reactions at different times varies greatly—thus we have had the rise and fall of peoples and nations.

The mechanisms at the varying times differed. Today, the mechanism seems to be confusion. This confusion exists throughout the world, and its fires are constantly being fed by so-called leaders. The pattern is one of world revolution.

This revolution has entered all phases of society. Its penetration has been such that turmoil and strife are our everyday bed-fellows. Everyone is waiting for a chance to jump on the other fellow. Nations are at each others' throats. Rights have been forgotten, duties have been shirked. Individual liberties are being thwarted or lost. Justice has lost her balance. Honesty is a word in the dictionary. Greed is prevalent. Power is the God. Subterfuge, the apostle.

History Repeats

This is history repeated. All through the ages Socialistic schemes have arisen only to crash in failure. Our era will do likewise.

During the past year, I have attempted to show what is Americanism, what is Socialism and Communism, and how we are being dragged into them. Also you have been admonished to stop playing politics, and to elect Americans as our leaders. I hope I have enlightened you, and trust you will act judiciously.

You are intelligent people and must be the leaders. You must see to it that the truth is spread, so that sanity will replace the confusion so prevalent in our Government today. Honesty and justice must be restored.

In any revolution in the past, the educated were always the lot to be the most persecuted, for the educated are the least likely to be led, because they have been taught to think. So it is with the physician. He has been taught how to think, but at times it seems as if he has forgotten when to think. It is only natural for man to accept a lackadaisical attitude, when the going is smooth, when no apparent problems are evident, but history has repeatedly shown the spirit of unrest is always active. Always a scapegoat must be found.

Shown Repeatedly

It has been repeatedly shown that in any revolutionary movement, the leaders always become conscious of the health of the masses and overly solicitious of their well being. So naturally the physician—medicine in general—is immediately brought to the front. Medicine is accused, justly or unjustly of many things.

The people are suffering at the hands of the doctor; the health of the nation is not what it should be; the masses are being denied the best medical care possible, because of a selfish medical profession; the wrongs of a few in the practice of medicine are projected as the actions of the many; the light of suspicion is cast on the physician; the doctor is accused of being selfish and mercenary, as one who delights in the ills of mankind, so that he can become wealthy. These are but a few of the charges hurled at Medicine.

**President's address presented at the 1958 KSMA Annual Meeting in Louisville on September 23.*

Today we have innumerable amateur medical authorities writing in the press and magazines giving their opinions as to what is wrong with the Medical Profession. In fact, some writers are constantly promulgating part truths as the whole unadulterated truth. Then we have the writers who give symposiums on a disease, without giving a full and accurate account, so that the lay person gets a wrong impression. In fact some writers leave the impression that if the doctor is not treating the patient along the lines written by them, that the doctor is guilty of malpractice, or is a stupid oaf, or is merely taking the patient for a monetary ride. These writers spectacularize the new and experimental procedures, not reporting that these procedures may be found to be faulty, dangerous or useless by the well known measure of time.

The chief reason given by the press and news agencies for the multitude of medical articles is that the public is hungry for medical news. Perhaps it is, but this news should be rendered in a just and forthright manner. There should be a liaison between the news agencies and the Medical Profession, so that more accurate reporting can be done. We would then have less sensationalism and the public would benefit.

New Schemes

The Medical Profession is constantly being harangued by new schemes. The harassment is continual. Charges and counter charges seem to be the modus operandi. We are led to believe that the public has lost faith in the Profession of Medicine; we are led to believe that we are tolerated but despised. We are told that the average patient thinks his doctor is a sincere, honest, capable physician who has the interest of the patient at heart, but who likewise believes that the Medical Profession, other than his doctor, is a lot to be despised and scorned.

How foolish these statements sound. If we but realize that the Medical Profession is made up of hundreds of thousands of these individuals whom the patient says "is sincere, honest and capable with the patient's interest at heart."

We are told our public relations are bad. We are led to believe that these relations can be restored by the engaging and hiring of people versed in this field. We are told we must not hesitate any longer, but do it now.

Fellow physicians, the only public relations with which we should be concerned are the relations we have with our patients, and our fellow citizens. If we keep this relationship as it should be, we will then have no need for the so-called experts. You, your patients, and your fellow citizens are the ingredients for a harmonious existence, for a feeling of well being and brotherly love. You are the one who can make it work—do it. If each endears himself to his patients, we will have no problems of third party medicine, the freedom of choice will be automatic, and the physician will again be the respected person of yesterday. The patient will want no part of third party medicine—he will want his own physician. Medicine is not an exact science. It still demands some of the art of Medicine. Learn to cultivate it and know how to use it. Realize the things that make for greatness.

Understanding an Art

Understanding is a special art. It takes time and practice. One must be able to devine in order to escape being deceived. One cannot be understanding unless he understands. Most truths are only half uttered, and only the observant gets them all. Learn to understand the problems of your fellow man.

Patience is a virtue. Most of us have shed some of this virtue because of the hurry and bustle of everyday life. We can regain it with some effort. Learn to listen to the other man's problems, and be tolerant of them. Perhaps the only medicine a person needs at the moment are a few minutes of attention and advice. More problems are solved with words of wisdom, than by a pill—even the tranquillizers.

Kindness is a gift that is never forgotten. It is usually repaid a hundred fold. What is more rewarding than the look of gratitude from a suffering soul for some kind act?

Gentleness a Gift

Gentleness is a gift. It does not connote the feminine. It can be the mark of the true gentleman. The sick and injured demand gentleness in our actions. Gentle palpation is more rewarding than the heavy hand; a soft voice more quieting than a raucous one.

Sympathy should extend from the heart. However, we as physicians should not let the heart overrule the mind. A little sympathy goes a long way. It leads to a better mutual respect and advances good will. It is convincing without argument, and gets things done without effort. It is a great art to recognize and value and to know how to attain this hidden gift.

Become a man of insight and judgment. This allows one to look at a man and to see through him and to understand him to the core. He is the man who looks sharply, sees clearly and deduces rightly, and comprehends what he uncovers. Don't let yourself be taken in by fools or be led by rabble rousers.

Be generous in your actions. Do not draw too fine distinctions, least of all in trivial matters. Do your day's work with a spirit of gallantry. Tolerance is a wonderful attribute. Many things should be allowed to pass unnoticed between intimates and friends, and especially between enemies. Meanness has no place in medicine.

Safety in Review

Gain the value of reconsideration. To appeal for review makes for safety, especially where dissatisfaction is evident, to gain time, either to soften judgment or to strengthen it. New reasons appear to corroborate and affirm the decision; if something is to be granted, then the gift is cherished more than one given in the haste of the moment. Justice can still be tempered with kindness. Prejudice warps our thinking, and makes appeals useless. Make your judgments on fact and not on fancy. A spirit of contradiction is often loaded with stupidity and peevishness. You may consider yourself a mental genius to see objection to everything, but the wrangler is soon stamped the fool and becomes thus an enemy to himself.

Neither should you hold to the wrong side out of stubbornness, for then your adversary has anticipated you and chosen the right, and you are beaten before you start. Your withdrawal will then be one of disgrace. You cannot fight a good war with bad weapons. The alert man has reason on his side, not passion.

Avoid the Commonplace

Nor should you follow either extreme in order to avoid being commonplace. Foolish acts border on the ridiculous. Trickery and fraud eventually lead to downfall and disgrace. The apparent winner at the moment is of no consequence, it is the winner at the end of the race that counts.

Learn to look beneath and under proposals, for ordinarily things are far other than they seem on the surface. The false is forever in the lead dragging all the fools along with it; the truth brings up the rear, it is late, and struggles along on the crutch of time. Allow room for it in the winner's circle.

Allow yourself to be open to suggestions. No one is perfect. We all need an adjustment to our steering mechanism at times. Even the jackass learns from the other. Only the fool will not listen to another. Don't deny yourself salvation because you cannot be reached. Leave a door open for friendship, for all should have a friend to advise without embarrassment and to even find fault. Have a trusted friend to whom you may turn in the hour of need. Choose your friends wisely, for some friends may be like the billowing clouds that disperse when the winds blow.

Learn to think ahead; to plan today for tomorrow and many days ahead. The forewarned has no dangers, the prepared, no accidents. If you wait until danger is at hand to think, your thinking is faulty. You will forever be on the defensive, hopping from pillar to post trying to avoid the mud puddles. A little planning avoids the soiling. This has been one of the faults of Medicine today. It has been so preoccupied with the present it has forgotten the past and failed to look into the future. It is forever on the defensive. A little planning ahead can place it on the offense. And this it had better do.

Weigh Pros and Cons

Learn how to believe slowly. Weigh the pros and cons. Sift the nuggets from the rocks. Remember the mistakes of the past. Don't be too easily stirred or you may too late stand ashamed. Maturity may be recognized in the slowness in which a man believes. Fools rush in, the wise man ponders his next step and moves forward at an easy, deliberate gait.

Cold deliberation should supplant passion and sudden outbursts. It is a mark of prudence. Learn how to let your wrath wax and wane. Know how to keep your head while the fools lose theirs. Still your tongue till it moves by your mind, then you are more apt to 'find your heart in it.' Control your anger till temperance has restored sanity. When you are right, neither hell nor high water should deter you, but be sure you are right.

Learn how to gauge public opinion. There are propitious times to act. A perfectly good proposition might be lost if launched at an inopportune time. Bide your time. More education of the public may be necessary. Do it honestly, and gain the confidence needed for

victory. Many a good ship has been lost because of misdirection. Take heed of the storm signals, and delay your journey in the calm waters of waiting, till the winds are in your favor. Then strike your colors and sail on to victory.

But make it a clean fight. You may be driven to fight, but not foully. Fight to win through superior strength and manner. The foul fighter may win the contest, but he is humiliated and despised. The man of honor is revered, he is the noble one. Even in defeat he stands shoulders and head above the crowd. And the physician is above the crowd. Intelligence will keep him from defeat.

Believe in Yourself

Also know how to help yourself. Believe in yourself. Keep a stout heart. Fear is less in him who can help himself. Don't surrender to fate. Learn how to carry your burdens so that the weight is balanced. Intelligence is the victor always. The path may seem longer, but in the end it is shorter. A few bruises keep us alert and sweetens the victory.

Avoid the intemperates, the monsters of impertinence. Do not become a faddist; shun the pompous and the presumptuous; keep away from the affected and the perverse; vacate those that are easily led, for these are the lights of the night and the ashes of tomorrow. They are the colossal asses briefly in the limelight. Medicine has no place for them, for medicine has been the lamp light for centuries. It leads the way. Keep its flame bright and ever larger.

Learn to Enjoy Life

Do not live at too great a pace. Learn how to spread out the things of life and enjoy them. For many life is finished before satisfaction is reached. Contentment indicates enjoyment, and the latter abounds in happiness. Make haste in your work but go slowly in enjoyment, and your existence here will be more rewarding. In heaven all is gladness, in hell all is sorrow, and since the earth is between the two, we have some of both.

Learn from those with whom you live, and live with those from whom you can learn. Let your relations be a school for knowledge and culture. Make your friends and colleagues your teacher, and you theirs. Mutual happiness and understanding is rewarding. Personal interests have drawn you together. Maintain and nurture them.

But beware that too much be anticipated from you. It is unfortunate to be overcelebrated and then not be able to live up to the expectations. For whatever be your excellences, if you do not know your subject, you will fall flat, and your audience feel cheated. You will then be open to ridicule and embarrassment. The cause which you were championing will lose ground. Know your subject before you speak. You never learn anything with your mouth open. Become a listener.

Cultivate your chief asset. Everyone attains eminence in something. Some excel in judgment, others in courage, some are proficient in many things, but even they excel in one.

Know Your Weaknesses

Discover your weaknesses and try to overcome them. Try to keep yourself in a position of strength. Don't lose your head. The intelligent man always knows there is more to be learned about something than he already knows. Keep searching.

Keep your self respect. Don't do anything to make you lose respect for yourself. See that you satisfy the man in the mirror, that you can look him straight in the eye, that you haven't cheated him, that he remains your friend.

When you must speak, say something. Speak with wisdom and courage. Stick to the subject, and don't speak out of both sides of your mouth, for the schemer is soon discovered. Be a man of principle. Fence straddling can be tolerated only so long. There comes a time for decision. Learn to make it.

These are but a few of the things which make men great. These are the bonds which bind men together. These separate the wheat from the chaf, the leaders from the masses. They should be a part of every physician. For the physician has always been esteemed. He only needs himself singly and collectively to defeat the threats of the third party.

EDITORIALS

The Student AMA

DURING the past seven years the AMA has fostered the Student AMA organization in all our medical colleges. It was known that certain subversive organizations were active among medical students, attracting their attention to unwholesome and harmful ideologies. The Student AMA has been very effective in keeping before them our professional standards and objectives to the end that they will begin their postgraduate and active careers in accord with the best traditions of medicine.

This student organization has maintained a very alert and effective group among all four classes at the University of Louisville School of Medicine. Mr. W. Neville Caudill, a senior, and a son of our late beloved and distinguished Fred W. Caudill, M.D., is now the president of this group. He and his staff are doing a superb job—and they will thereby help tremendously in the formative years of the young physicians.

We congratulate these young men upon a worthwhile endeavor, intelligently and energetically undertaken; and we as a profession welcome them into our fellowship.

Sam A. Overstreet, M.D.

Seventy-One Per Cent Is A Failing Grade!

IF we had an automobile or a secretary or a business which was only 80 per cent effective we would in all probability do something very quickly to raise the quotient of efficiency, and very wisely so. Twenty per cent dead weight will keep us behind the parade in any endeavor.

In Kentucky there are 2,550 physicians actively engaged in the practice of medicine. This is the same number as one year ago—131 more than two years ago. Of these, 2,041, or 80 per cent, are active KSMA members and only 1,818, or 71 per cent, are active AMA members. Incidentally, these percentages compare fairly well with other states. There is here a clear loss of potential which we may, by individual effort, improve.

Why should a practicing physician belong to his state or national organization? One reason is a rather selfish one—that he may enjoy the benefits of such membership, namely the scientific assemblies, journals, postgraduate training, fellowship and prestige which such membership provides. In our own case as a state organization, an AMA enrollment of over 2,000 would allow us three delegates to the AMA instead of the present two.

The second reason we believe to be more compelling. We need now, more than ever before, unity of purpose and action. Our colleagues from Great Britain have told us that physicians of England were subjected to unfavorable governmental regulation because they as an organized group were not able to say clearly in one voice just what type of medical care they could provide and under just what sociological conditions they desired to work. Our visiting British guests have urged—even pleaded with us sometimes—to avoid their unfortunate plight. We have been told that the closest organization with a clearly stated objective and program would be our only salvation.

Our progenitors passed on to us a medical profession in which participation was and is regarded as an honor and distinction. We should not be willing to give to the generation following us a profession less esteemed. What if, in an effort to do so, we pay higher mem-

bership dues and multiply the hours spent in behalf of better organization, better legislation and better medical service. Can we afford to do less for ourselves or for the physicians of tomorrow?

If we are to mold the pattern of the immediate future—and every generation bears such a responsibility—let us see to it that our planning is good and sound. The advantages of liberty and health and the freedom of choice which we today so abundantly enjoy are a heritage from generations to whom service and sacrifice were basic. We may well allow our efforts to be guided by the same formulae.

They to whom these suggestions are directed may not read them because many of them are not members even of KSMA and do not receive this Journal. May not we who are of this opinion make a special effort during the next few weeks and months to approach our indifferent colleague who may reside and work near us and solicit his interest and help. It will prove a very fruitful endeavor to him as well as to us. In union there is strength.

Sam A. Overstreet, M.D.

We Salute Our Advertisers

AS the old year draws to a close and we pause to evaluate Journal progress during 1958, we become increasingly aware of the major contributions made by our Journal advertisers.

They offer a valuable addition to the postgraduate medical education of physicians throughout the state—both through their advertisements showing the very latest pharmaceuticals, surgical equipment, and services available to members of the profession; and through their financial support which enables us to expand Journal coverage at no additional cost to KSMA members.

Advertisers are carefully screened—assuring you that the products and services advertised on the pages of the Journal are ethical and approved by the profession.

The "ads" in the Journal offer a ready reference file of the very latest advances in drug therapy, equipment, and services. Through the Journal advertisements, the busy physician can keep "up-to-date" with the rapid progress being made in allied fields. In a matter of minutes, he may gain valuable information which will benefit him and his patients.

We are grateful to our advertisers for their part in enabling us to make our Journal more attractive, useful, and readable. With their continued support, we look forward to another year of progress with the expectation of bringing you a Journal of increasingly high calibre in 1959.

Greetings of the Season
and
Best Wishes for Happy Holidays

Sam A. Overstreet, M.D., Editor
and
The Journal Staff

ORGANIZATION SECTION

Mayo Pathologist to Address Kentucky Society Dec. 13

T. B. Magath, M.D., head of the Department of Clinical Pathology, Mayo Clinic, will be the featured evening speaker at the December 13 meeting of the Kentucky Society of Pathologists at the Lexington Clinic. His address on "The Echinococcus Problem" will be illustrated by a movie.

The program, announced by the Society's president, James T. McClellan, M.D., Lexington, will open at 3 p.m. with a morphology workshop. This will be followed by a scientific presentation, including papers on "Familial Agranulocytosis" by J. Pat Andrews, M.D.; "Blood Coagulation With Special Reference to Early Stages" by Hubert Pirkle, M.D., and "Echinococcus Cyst of Liver" by Doctor McClellan.

Election of officers is scheduled for a business meeting starting at 4:30 p.m. Dinner will be served in the Clinic building.

Dr. Harvey of Glasgow Honored By Eisenhower's Appointment

Daryl P. Harvey, M.D., Glasgow, has been appointed by President Dwight D. Eisenhower as vice chairman of the National Committee of the White House Conference on Children and Youth to be held in Washington, D. C., in March 1960.



Doctor Harvey

In his letter to Doctor Harvey, the President expressed appreciation for the physician's willingness to serve on this important planning committee. The correspondence said the new committee would hold its first meeting in Washington, December 16, 17, and 18.

The first White House Conference on Children and Youth was held in 1910 and similar conferences have been held at 10-year intervals since. As a result of the first conference, the U. S. Children's Bureau was established in 1912. Broad purpose of the conferences is "for a nation-wide stock-taking of children's needs."

"We wish to congratulate Doctor Harvey on his appointment," said R. W. Robertson, M.D., Paducah, KSMA president. "We feel he will make a major contribution to the success of this effort."

Doctor Harvey, who is associated with the Howard Clinic, has been active in KSMA organizational work for many years, has chaired the KSMA Committee on School Health, and is currently working on that committee and the Rural Health Committee.

At the annual meeting of the Kentucky Academy of General Practice in April of 1959, Doctor Harvey will be installed as its president. He has also served in other capacities of the State group and has been Vice Speaker of the American Academy of General Practice Congress of Delegates. He is currently serving on its Legislative Committee.

House of Delegates Committees Announced by Dr. Sparks

House of Delegates appointed committees which have been chosen to serve during 1958-59 have been announced by Clyde C. Sparks, M.D., Ashland, speaker of the KSMA House.

Appointed to the three House committees are:

Committee to Study the Constitution and Bylaws
Colley L. Combs, M.D., Hazard, Chairman
Robert S. Dyer, M.D., Louisville
Barton L. Ramsey, M.D., Somerset
Richard J. Rust, M.D., Newport
George H. Widener, Jr., M.D., Paducah

Committee on the Corporate Practice of Medicine
George P. Archer, M.D., Prestonsburg, Chairman
Clements W. Air, M.D., Ludlow
Rankin C. Blount, M.D., Lexington
Marion O. Crowder, M.D., Owensboro
Stephen R. Ellis, M.D., Fairdale
John T. Giannini, M.D., Louisville
B. B. Holt, M.D., Ashland
Burl Mack, M.D., Pewee Valley

Awards Committee
Glenn U. Dorroh, M.D., Lexington, Chairman
William H. Bizot, M.D., Louisville
Donald Chatham, M.D., Shelbyville
Robert W. Fidler, M.D., Flemingsburg
Maher Speevack, M.D., Munfordville

KAGP Symposium Attended by 175

About 175 physicians attended an all-day "Symposium on Recent Advances in Medicine" sponsored by the Kentucky Chapter, American Academy of General Practice, at the Kentucky Hotel in Louisville on November 6.

Featured speakers were Samuel F. Ravenel, M.D., clinical professor of pediatrics at the University of North Carolina Medical School, Chapel Hill, and James A. Campbell, M.D., professor of medicine at the University of Illinois College of Medicine, Chicago.

D. C. Elkin, M.D., Louisville Native Dies in Atlanta

Daniel C. Elkin, known as one of the nation's leading heart surgeons, died in Atlanta on November 3 at the age of 65. A native Louisvillian, he was chairman of the Department of Surgery at the Emory University School of Medicine in Atlanta for 23 years before his retirement in 1954.

Doctor Elkin will be remembered by many KSMA members as a featured speaker of the KSMA Centennial in 1951. He had been residing at his family's farm near Lancaster, Ky., but had gone to Atlanta on October 6 for treatment of a heart ailment.

A past president of the American College of Surgeons, he was also a vice-president of the Kentucky Medical Foundation, and was a member of the University of Kentucky Board of Trustees.

He was the third man to receive the Matas Award for Vascular Surgery which is given for outstanding original work in surgery of the heart, veins, and arteries. Doctor Elkin had also been a visiting professor on the medical schools of Harvard, Virginia, and Michigan universities.

Louisville Medical Foundation Formed in November

A Louisville Medical Foundation—dedicated to the betterment and support of the University of Louisville Medical School and Medical Center—was formed by 31 prominent Louisvillians early in November.

Officers of the new group include: Bart A. Brown, a senior vice president of Citizens Fidelity Bank and Trust Company, president; William A. Stoll, retired vice president of the old Stoll Oil and Refining Company, vice president; Ira J. Porter, first vice president of the Louisville Trust Company, secretary-treasurer; and Attorney William H. Abell, general counsel.

Formation of the Louisville group stemmed from a report and recommendations made by a committee of 10 Louisville physicians including, J. Armand Fischer, R. Arnold Griswold, J. Duffy Hancock, Sydney E. Johnson, Robert Lich, H. V. Noland, Sam A. Overstreet, R. Glen Spurling, C. Dwight Townes, and William C. Wolfe. The physicians are among the charter members of the new Foundation.

Aims of the group are similar to those of the Kentucky Medical Foundation, which was formed to promote and support the new University of Kentucky Medical Center in Lexington.

Among the aims of the new foundation are: cooperation with city, county, officials and the president and board of trustees of the University of Louisville, cooperation with the Kentucky Medical Foundation, promotion of alumni and public awareness of the importance of a medical center, assurance of continued state aid for the medical school, expedition of modernization of the physical facilities of the medical school, and solicitation of private and foundation contributions for endowment of chairs or departments within the medical school and for research and equipment.



KSMA President Robert W. Robertson, M.D., Paducah, (left) and President-Elect Irvin Abell, Jr., M.D., Louisville, (right) discuss the problems facing medical society leaders with Ervin L. Bernhart, M.D., Milwaukee, speaker at the Fifth District meeting in Louisville.

125 Hear Dr. Bernhart's Talk At Fifth District Meeting

Ervin L. Bernhart, M.D., Milwaukee, Wis., president of the Conference of Presidents and Other Officers of State Medical Associations, was the featured speaker at the dinner meeting of the Fifth Councilor District at the Medical Arts Building in Louisville, November 17.

"Drought on the Grass Roots" was the subject of Doctor Bernhart's talk, which was heard by approximately 125, according to Carlisle R. Morse, M.D., Louisville Councilor for the district. Doctor Bernhart's presentation dealt with the general subject of physician participation in legislative activity.

"How long can medicine expect to keep its legislative friends in any party if it does not accept the responsibility of citizens for participation in the most basic of democratic processes—the selection and support of competent, well qualified and well informed legislative candidates," Doctor Bernhart said.

The Fifth Councilor District is composed entirely of the members of the Jefferson County Medical Society.

Overstreet, Hasler, Dalo Winners in KSMGA Tournament

Winners in the annual Kentucky State Medical Golf Association Tournament at the Audubon Country Club on September 23, 24, and 25 have been announced by Harold W. Baker, M.D., Louisville, who was in charge of arrangements.

Top winners are: T. J. Overstreet, M.D., Lexington, senior low gross; N. B. Hasler, M.D., Louisville, low gross, and Victor Dalo, M.D., Louisville, low net.

Daily winners are: September 23, W. W. Leavell, M.D., Lexington, low gross, and Robert Reichert, M.D., Covington, low net; September 24, T. J. Overstreet, M.D., Lexington, low gross; W. V. Lyon, M.D., Ashland, low net; September 25, N. B. Hasler, M.D., Louisville, low gross, and Victor Dalo, low net.

Shelby-Oldham-Henry Group Entertains Lawmakers

Two State Senators and three Representatives were guests of the Shelby-Oldham-Henry County Medical Society Thursday evening, November 13, at the monthly meeting in the Old Stone Inn at Simpsonville, Kentucky.

Edward B. Mersch, M.D., Covington, immediate past president of the Association, was the featured speaker and Wyatt Norvell, M.D., New Castle, councilman from the Seventh District, was the toastmaster.

Special guests of the Tri-County Group were Senators James R. Hamilton, Georgetown, and Alvin Kidwell, Sparta, Representatives Paul T. Ratcliffe, Shelbyville; Odis Chaudoin, Pewee Valley, and Roy Searcy, Carrollton.

Southern Medical Attracts 101 KSMA Members

One hundred one KSMA members attended the 52nd Annual Meeting of the Southern Medical Association in New Orleans, La., November 4, 5 and 6.

Milfred O. Rouse, M.D., Dallas, Texas, was installed as the new president of the SMA. He succeeds W. Kelly West, M.D., Oklahoma City, Okla.

The following physicians from Kentucky registered at the one-of-the-best-attended meetings in the history of the SMA, according to reports of the Daily Bulletin:

November 4

Oren A. Beatty, John P. Bell, J. Randolph Buskirk, Patrick J. Cavanaugh, James Childers, Ralph M. Denham, Clarence E. Denton, Fernando A. Gorchs, J. Duffy Hancock, W. O. Johnson, R. O. Joplin, E. E. Landis, J. B. Marshall, Robert F. Monroe, Carlisle Morse, A. Clayton McCarty, William P. Peak and Carroll L. Witten, all of Louisville.

C. M. Brassfield, Elizabethtown; William H. Bryant and Rex E. Hayes, Glasgow; E. S. Carter, Jr., Hazard; Delmas M. Clardy, John W. Harned and Harvey B. Stone, Hopkinsville; Allen L. Cornish, John B. Floyd, John B. Floyd, Jr., Maurice Kaufmann, U. W. Leavell, Joseph H. Saunders and K. R. Thompson, all of Lexington.

Guy C. Cunningham and Stuart H. Light, Ashland; E. E. DeVillez and C. N. Heisel, Covington; William L. Donham, Middlesboro; Major S. Foster and H. Tod Smiser, Cynthiana; G. Y. Graves, Bowling Green; W. Burton Haley, Orion Leon Higdon, Hubert Rex Holland and Walter R. Johnson, all of Paducah; C. Noel Hall, Versailles; Lyman S. Hall and M. M. Hall, Campbellsville; Alfred E. Jaunzems, London; Charles B. Johnson, Russell; David L. Jones, Fulton; Merrill W. Schell, William Lee Tyler and Frank Wright, all of Owensboro; Edward M. Schneider, McDowell; William B. Simpson, Mayfield, and M. C. Spradlin, Somerset.

November 5

J. Luther Fuller, John D. Gordinier, Douglas M. Haynes, Robert Lich, Jr., Jesshill Love, Paul Mapother, William Ray Moore, Sam A. Overstreet, A. J. Pauli, Frank Pirkey, E. P. Scott, Arthur J. Shulthise, Raymond C. Comstock, Harper Richey, James E. Ryan, Karl D. Winter, Raleigh E. Witten and Allan F. Zoeller, all of Louisville.

L. F. Beasley, Franklin; Marion G. Brown, Jane B. Sears, K. L. Sears, Robert D. Shepard, Earle E. Spencer, Jr., Charles E. Rankin and A. Sam Warren, all of Lexington; William Humphrey, Sturgis; Ralph D. Lynn, Elkton; A. O. Miller, Scottsville; Howard R. Molony, Covington; C. P. Orr and Walker M. Turner, Paducah.

Leland E. Payton, Lynch; F. M. Picklesimer, Paintsville; James I. Salter, Mt. Sterling; R. D. Sanders, Williamsburg; Joseph Schickel, Burkesville; Frank K. Sewell, Mt. Sterling; A. V. Simon, Middletown; Charles B. Spalding, Bardstown; and Dixie E. Snider, Springfield.

November 6

Raymond C. Comstock, Joseph A. Little and George B. Sanders, all of Louisville; Walker M. Turner, Paducah.

KSARN Elects Officers for 58-59 at Annual Meeting in October

Lola Belle Akin, R.N., Paintsville, was re-elected president of the Kentucky State Association of Registered Nurses at the Association's 52nd Annual Meeting in Louisville in October.

Other officers of the KSARN are: Marjorie Glaser, R.N., Louisville, who was elected first vice-president last year; Dora E. Volotin, R.N., Lexington, who was elected second vice-president at this meeting; Elizabeth S. Moore, R.N., Lexington, who was elected secretary; and Elsie Pearson, R.N., Louisville, who was re-elected treasurer.

Elected to the Board of Directors were: Ruth Cole, R.N., Murray, and Ann Asbury, R.N., Lexington. Other directors are: Regina L. Smith, R.N., Pineville; Arnetta T. Duncan, Owensboro; Sue Higdon, R.N., Louisville, and Joy McCuddy, R.N., Lexington.

Dr. Joplin Appointed by Governor To Commission on Aging

Robertson O. Joplin, M.D., Louisville, Chairman of the KSMA Committee on Problems of the Aged, has just been appointed by Governor A. B. Chandler as a member of the Governor's Commission on Aging.

Other Kentucky physicians serving on the Commission are J. Duffy Hancock, M.D., Louisville, former KSMA President, and J. C. McGuire, new director of the Lexington-Fayette County Health Department.

Purpose of the Commission is to assist local committees to organize programs for senior citizens. It is expected that eventually the Commission will sponsor a state-wide conference on aging.

NOTICE

You will note that there is no "Case Discussion" in this issue of the Journal. However, the monthly feature—"Case Discussions" will resume in the January issue of the Journal.



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SEARLE

STUDENT AMA

What Is SAMA?

Many of the younger physicians have belonged to SAMA during their formal medical education and most of the men who attended medical school before the founding of this organization know relatively little about the organization, its services or its aims. Both groups, therefore, may be interested in a brief and general review of these topics.

Although SAMA was founded about eight years ago under auspices of the AMA, it has remained an autonomous organization with its own national headquarters and a large full time staff of executive personnel. The policies and activities of SAMA are governed by its House of Delegates which meets once a year. Each member school is entitled to one delegate and one alternate delegate to the House. In the interim, the association is controlled by its Executive Committee. Several standing committees are maintained, regional conferences are held periodically and, in general, it operates much as does any other national professional organization. There are over 70 member schools and these chapters keep the executive secretary and assistant executive secretary busy 12 months a year.

The objectives of SAMA are directed toward improving the lot of medical students. The organization has thus far maintained a strict "hands-off" policy towards politics, in contrast with the usual student organization which so often seems bent on curing the ills of the world—all in one year.

Of tangible benefit to the medical student are the programs of SAMA. Among these are: The New Physician, a journal directed to the student of medicine; a low-cost life insurance plan; a library service which makes available the resources of the AMA library to the student; a hospitalization insurance plan suiting the needs of the student; the SAMA Foundation, a loan fund available to members at low interest rates—beginning in 1959; and, finally, a malpractice insurance policy is being devised to cover residents and interns at a cost lower than that usually available.

Other programs of less direct import to the medical student but of equal importance in the total scheme are the various surveys made by SAMA. These have been of the nature of gathering information concerning the financial status of students, interns and residents; comparative evaluations of various internships; weak points in the general plan of medical education; and programs which might benefit students if installed in their schools. Such information-gathering is made possible by the large and varied membership of SAMA. The information so gained has been of use to hospitals in setting up internship programs, to schools in planning student activities and to SAMA itself in its efforts to secure better wages and conditions in graduate medical training.

The chief benefit of SAMA is intangible, it is the membership in a truly professional organization. We like to think that SAMA, as the first of the many organizations to which a physician may belong, serves to bridge the gap between the non-professional state and the eventual participation of the physician in all matters relevant to his art and science.

W. Neville Caudill
President, U. of L. Chapter, SAMA

Health Taxes and Hosp. Bond Issues Voted in Recent Elections

In the recent elections, six Kentucky counties (out of 20 polling) voted for local health taxes and five out of five counties voted hospital bond issues.

Counties voting for local health taxes to make them eligible for more Federal aid were: Johnson, Knott, Leslie, Magoffin, Menifee, and Wolfe. This brings the total of counties having such taxes to 31. In 1954, the General Assembly passed legislation enabling public health taxing by districts. In 1955, the first counties voted on such legislation.

The proposed taxes ranged from 6 to 15 cents—all with the aim of improving health services. Counties voting against the health taxes were: Boyd, Boyle, Clark, Daviess, Grant, Greenup, Harlan, Hopkins, Laurel, Lawrence, Logan, Madison, Marshall and Union.

Counties voting for hospital bond issues were Warren, $650,000, and Campbell, $700,000, for additions to existing Hill-Burton appropriations; Fleming, $245,000; Webster, $200,000; and Cumberland, $200,000; for new appropriations.

Book on Med. School Admission Available from U of K

A booklet entitled, "How to Apply for Admission," is now available from the College of Medicine of the University of Kentucky in Lexington.

Designed to give information to persons interested in entering the school in September of 1960, it describes the philosophy and program, the requirements for admission, the academic preparation needed, the criteria of selection, financial considerations, and the procedure for application.

Admission forms for the new college will be available after June 1, 1959, according to William R. Willard, M.D., Vice President and Dean of the UK Medical Center. Requests for further information should be sent to: Committee on Medical College Admissions, Office of the Registrar, University of Kentucky, Lexington, Ky.

Dr. McAuliffe Heads Alumni Group

George F. McAuliffe, M.D., Louisville dermatologist, was recently elected president of the University of Louisville Medical Alumni to succeed Karl D. Winter, M.D., Louisville, who had been president since the formation of the group three years ago.

Robert Jasper, M.D., Winchester, was chosen vice president, and David M. Cox, M.D., Louisville, secretary-treasurer. Doctor McAuliffe was formerly secretary of the group, which is aimed at strengthening U of L Alumni Relations and building a new medical school.

Dr. Pierce on AMA Committee

W. Vinson Pierce, M.D., Covington, was recently appointed to the new Committee on Insurance and Prepayment Plans by the Council on Medical Services of the AMA.

Announcement of his appointment to the nine-man committee was made by George W. Cooley, Council secretary. The new committee takes on the work formerly handled by two committees—the Committee on Prepayment Medical and Hospital Service and the Committee on Relations with Lay Sponsored Voluntary Health Plans.

FNS Seeks Medical Director

The Frontier Nursing Service of Leslie County has announced an opening for a medical director at its hospital at Hyden, Ky. Among his qualifications, the physician must be able to handle emergency surgical and complicated obstetrical cases. He will be provided a modern furnished home in which to live and a jeep for transportation.

The Service's hospital is a well-equipped, 27-bed hospital staffed by registered professional nurses. Practice of a medical director is accepted by the American Board of Obstetrics and Gynecology as complying with its post-training requirement. Further information may be obtained from Mrs. Mary Breckinridge, Director, Frontier Nursing Service, Wendover, Leslie County, Kentucky.

U of L Eye Dept. Given $10,000

The Knights Templar Eye Foundation has donated $10,000 to the Department of Ophthalmology at the University of Louisville School of Medicine. C. Dwight Townes, M.D., chairman of the department of ophthalmology, said that the Foundation made its first grant to the department a year ago. This was for research on the eye's vitreous humor. Doctor Townes said the new grant will be used for continued study in the same field and for other departmental needs.

Dr. McGuire Named Health Officer

J. C. McGuire, M.D., former director of the Bureau of Preventive Medicine of the State Health Department, is the new Lexington-Fayette County health officer. He replaces Harry K. Dillard, M.D., who died October 9. Doctor McGuire's appointment by State Health Commissioner Russell E. Teague, M.D., received the unanimous vote of the Lexington-Fayette County Board of Health, according to its chairman, Richard G. Elliott, M.D.

A graduate of the University of Louisville School of Medicine, the new health officer started his public-health career as a health officer in Lincoln, Nicholas and Pulaski counties from 1932 to 1934. He was in public-health work in Mississippi and Florida and in the Air Force, returning to Kentucky in 1946.

McDowell Home Pictured

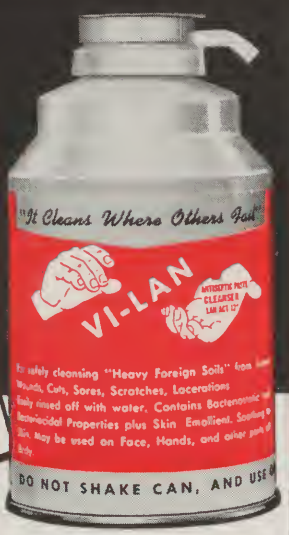
The cover of the October issue of "The Kentucky Press," official publication of the Kentucky Press Association, carried a picture of the McDowell Memorial Home in Danville with the caption: "Kentucky's Showcase."

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EASY TO USE

Just press the button! You'll have a proper amount of cream to use — economical — NO WASTE, NO MESS!

VI-LAN has passed clinical patch-testing. It has excellent bacteriostatic and bacteriocidal properties. Helps prevent infection.

Excellent for use in hospitals, plant first-aid departments, clinical laboratories and in every doctor's office. Safely cleans heavy foreign soils from suture wounds, burns, cuts, sores, abrasions and lacerations.

Excellent for use in office and plant for removing printing and all types of reproducing inks.

May be used "with or without" water on face, hands and other parts of the body. Easily rinsed off with water.

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**TRADEMARK, REG. U. S. PAT. OFF.—THE UPJOHN BRAND OF CRYSTALLINE NOVOBIOCIN SODIUM

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Upjohn

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Make new Panalba*

(PANmycin† Phosphate plus ALBAmycin**)

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Available forms:

1. Panalba Capsules, bottles of 16 and 100 capsules. Each capsule contains:

Panmycin phosphate (tetracycline phosphate complex) equivalent to tetracycline hydrochloride .....250 mg.
Albamycin (as novobiocin sodium)...125 mg.

2. Panalba KM *† Flavored Granules. When sufficient water is added to fill the bottle, each teaspoonful (5 cc.) contains:

Panmycin (tetracycline) equivalent to tetracycline hydrochloride .....125 mg.
Albamycin (as novobiocin calcium)..62.5 mg.
Potassium metaphosphate .....100 mg.

Dosage:

Panalba Capsules
Usual adult dosage is 2 capsules q.i.d.

Panalba KM Granules
For the treatment of moderately acute infections in infants and children, the recommended dosage is 1 teaspoonful per 15 to 20 lbs. of body weight per day, administered in 2 to 4 equal doses. Severe or prolonged infections require higher doses. Dosage for adults is 2 to 4 teaspoonfuls 3 or 4 times daily, depending on the type and severity of the infection.


"ankle-itis"
there's pain and
inflammation here...
it could be mild
or severe, acute or
chronic, primary or
secondary fibrositis — or even
early rheumatoid arthritis

more potent and comprehensive treatment than salicylate alone

. . assured anti-inflammatory effect of low-dosage corticosteroid[1] . . . additive antirheumatic action of corticosteroid plus salicylate[2-5] brings rapid pain relief; aids restoration of function . . . wide range of application including the entire fibrositis syndrome as well as early or mild rheumatoid arthritis

more conservative and manageable than full-dosage corticosteroid therapy—

. . much less likelihood of treatment-interrupting side effects[1-6] . . . reduces possibility of residual injury . . . simple, flexible dosage schedule

THERAPY SHOULD BE INDIVIDUALIZED

acute conditions: Two or three tablets four times daily. After desired response is obtained, gradually reduce daily dosage and then discontinue.

subacute or chronic conditions: Initially as above. When satisfactory control is obtained, gradually reduce the daily dosage to minimum effective maintenance level. For best results administer after meals and at bedtime.

precautions: Because SIGMAGEN contains prednisone, the same precautions and contraindications observed with this steroid apply also to the use of SIGMAGEN.



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corticoid-salicylate compound tablets

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METICORTEN® (prednisone)	0.75 mg.
Acetylsalicylic acid	325 mg.
Aluminum hydroxide	75 mg.
Ascorbic acid	20 mg.

Packaging: SIGMAGEN Tablets, bottles of 100 and 1000.

References: 1. Spies, T. D., et al.: J.A.M.A. 159:645, 1955. 2. Spies, T. D., et al.: Postgrad. Med. 17:1, 1955. 3. Gelli, G., and Della Santa, L.: Minerva Pediat. 7:1456, 1955. 4. Guerra, F.: Fed. Proc. 12:326, 1953. 5. Busse, E. A.: Clin. Med. 2:1105, 1955. 6. Sticker, R. B.: Panel Discussion, Ohio State M. J. 52:1037, 1956.

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In Memoriam

M. W. BLANKENSHIP, M.D.
Fulton
1923 - 1958

M. W. (Jack) Blankenship, M.D., Fulton, was accidentally shot to death while hunting in Colorado on October 17 by a member of another hunting party who said he thought the physician was a bear or elk emerging from the thicket.

Doctor Blankenship was on a hunting trip with a party of nine from the Fulton area. A graduate of the University of Tennessee Medical School in 1951, he was a co-owner of Hillview Hospital in Fulton. He came to Fulton after practicing in Calvert City for several years, and was active in civic affairs. Doctor Blankenship was a native of Arkanasas.

D. G. SKAGGS, M.D.
Prospect
1876 - 1958

D. G. Skaggs, Sr., M.D., a physician for over half a century, died in Kentucky Baptist Hospital in Louisville on October 23 at the age of 82.

He had been in general practice for 56 years—45 years in the Prospect area. A graduate of the University of Louisville School of Medicine in 1902, Doctor Skaggs practiced in Green County before moving to Prospect in 1913. Prior to entering medical school he had taught school in Green County.

W. E. SUMMERVILLE, M.D.
Louisville
1900 - 1958

William Eugene Summerville, M.D., a surgeon in Louisville since 1925, died at the home of friends after an illness of two years on November 11.

Doctor Summerville served as surgeon for the Louisville & Nashville, Kentucky and Indiana Terminal, and Illinois Central railroads. He was on the staff of SS. Mary and Elizabeth Hospital and was past chief of staff there. Doctor Summerville graduated from the University of Louisville School of Medicine in 1925.

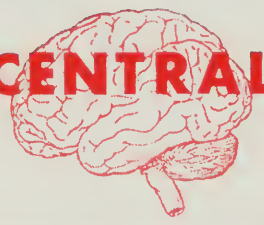
LEON RUNYON, M.D.
Lexington
1909 - 1958

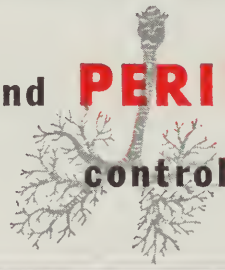
Leon Runyon, M.D., of Lexington, died November 9 of a heart attack at Obion, Tenn., where he had conducted a clinic for the past eight years. He also was connected with the Union City, Tenn., hospital as a surgeon.

A native of Pike County, Doctor Runyon was graduated from the Tennessee Medical School and did postgraduate work in surgery at the University of Chicago. He served as a lieutenant in the Navy Medical Corps during World War II and was assigned to a hospital ship as surgeon.

(Continued on Page 1276)

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SYNEPHRICOL® cough syrup

ANTITUSSIVE • DECONGESTANT • ANTIHISTAMINIC

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Central Antitussive Effect — mild, dependable
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Neo-Synephrine® hydrochloride	5.0 mg.
Thenfadil® hydrochloride	4.0 mg.
Dihydrocodeinone bitartrate	1.33 mg.
Potassium guaiacol sulfonate	70.0 mg.
Ammonium chloride	70.0 mg.
Menthol	1.0 mg.
Chloroform	0.02 cc.
Alcohol	8%

Bottles of 16 fl. oz.

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In recent years, a number of new synthetic anticholinergic drugs with numerous and varying side effects have been investigated for treatment of peptic ulcer. However, a double-blind study conducted recently by Cayer et al suggests that the use of such anticholinergic drugs is seldom necessary. The authors concluded that "The percentage of 'good to excellent' results obtained in patients on continuous long-term antacid therapy with DAA (74%) is essentially the same as that previously noted in ulcer patients treated under similar conditions with potent anticholinergic drugs alone."

The authors' choice of dihydroxy aluminum aminoacetate (DAA) was based on the fact that "the tablet form of DAA (is) more active than a variety of straight aluminum hydroxide magmas." They further commented that "Because of the convenience of tablet medication as compared with the liquid gel—a convenience which in the use of other tablets is gained at the expense of therapeutic effectiveness—dihydroxy aluminum aminoacetate was used exclusively."

ALGLYN (dihydroxy aluminum aminoacetate) Tablets are supplied in bottles of 100 tablets (0.5 Gm. per tablet).

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Now—All cold symptoms can be controlled

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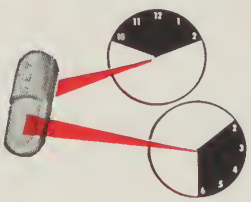
- *...the superior decongestant and antihistaminic action of Triaminic*
- *...non-narcotic cough control as effective as with codeine, but without codeine's drawbacks*
- *...an expectorant to help the patient expel thickened mucus*
- *...the specific antipyretic and analgesic effect of well-tolerated APAP*
- *...the prompt and prolonged activity of timed-release medication*

Each* TUSSAGESIC *Tablet contains:

TRIAMINIC®	50 mg.
(phenylpropanolamine HCl	25 mg.;
pheniramine maleate	12.5 mg.;
pyrilamine maleate	12.5 mg.)
Dormethan (brand of dextromethorphan HBr)	30 mg.
Terpin hydrate	180 mg.
APAP (N-acetyl-p-aminophenol)	325 mg.

Also available:
for those who prefer liquid medication—
Tussagesic suspension
In each 5 ml.: Triaminic, 25 mg.; Dormethan, 15 mg.; terpin hydrate, 90 mg.; APAP, 120 mg.

Tussagesic timed-release tablets provide relief in minutes, which lasts for hours



first—3 to 4 hours of relief from the outer layer

then—3 to 4 more hours of relief from the inner core

Dosage: 1 tablet in the morning, mid-afternoon, and evening, if needed. Should be swallowed whole to preserve the timed-release action.
Suspension: Adults—1-2 tsp. every 3-4 hours; Children 6-12 years old—1 tsp. every 3-4 hours; Children under 6—dosage in proportion.

NEW **Tussagesic***

*Contains TRIAMINIC to STOP *running noses* and open stuffed noses orally*

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Proven

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in over 600 clinical studies

Specific

FOR RELIEF OF ANXIETY
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Does not interfere with autonomic function
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Has not produced hypotension,
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MEPROBAMATE (WALLACE)

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Supplied: 400 mg. scored tablets, 200 mg. sugar-coated tablets.

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In Memoriam (continued)

ERNEST A. TERRY, JR., M.D.
Louisville
1920 - 1958

Ernest A. Terry, M.D., medical director at General Electric's Appliance Park in Louisville, was fatally shot while on the way to teach a Sunday-school class at Highland Presbyterian Church on October 26.

A graduate of Columbia University College of Physicians and Surgeons in 1945, Doctor Terry was a diplomate of the American Board of Occupational Health. He had been at General Electric for the past seven years, and took an active part in community affairs. Doctor Terry was a director of the Child Guidance Clinic and an associate professor of occupational health at the University of Louisville's Medical School. He was a past chairman of the KSMA Associate Committee on Industrial Medicine and Surgery.

C. B. VanARSDALL, SR., M.D.
Harrodsburg
1874 - 1958

Condit B. VanArsdall, Sr., M.D., retired physician, died on October 25 in Haggin Memorial Hospital, Harrodsburg, after a long illness.

Through the years, Doctor VanArsdall had been an important force in the civic development of his community. He served as chairman of the building-fund campaign for the Haggin Memorial Hospital which was built without federal aid. In 1953, 300 persons attended a banquet in his honor to mark 50 years of medical practice. A graduate of Johns Hopkins Medical School in 1902, he has sons who are also in the profession.

J. H. HOLBROOK, M.D.
Paintsville
1874 - 1958

James Harrison Holbrook, M.D., who had practiced in Paintsville and Johnson County for 46 years, died at his home in Paintsville on October 12 after a long illness.

A founder of the Paintsville Hospital, Doctor Holbrook graduated from the University of Louisville Medical School in 1900. Doctor Holbrook, who had been active in civic affairs and was a member of the Paintsville Rotary Club, had been in poor health for the past eight years. He was a native of Lawrence County.

WILLIAM NOEL CAIN, M.D.
Lexington
1898 - 1958

William Noel Cain, M.D., who was critically burned at a fire in his home on October 27, died at the Good Samaritan Hospital in Lexington on October 30.

A native of Carlisle, Doctor Cain graduated from the University of Louisville Medical School in 1919. Doctor Cain served his internship at St. Joseph Hospital in Lexington and for eight years he was associated with the Utah Copper Mines in Bingham, Utah.

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Pentaerythritol Tetranitrate ...15 mg.
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Today, MERCK SHARP & DOHME proudly
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achievement of the first corticosteroid
decade—DECADRON (dexamethasone)
—a new and unique compound, which
brings a new order of magnitude
to corticosteroid therapy



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DEXAMETHASONE

to treat more patients more effectively

MSD MERCK SHARP & DOHME

a new order of magnitude

In Anti-Inflammatory Potency

DECADRON "possesses greater anti-inflammatory potency per milligram than any steroid yet produced,"[1] and is "the most potent steroid thus far synthesized."[2] Milligram for milligram, it is, on the average, 5 times more potent than 6-methylprednisolone or triamcinolone; 7 times more potent than prednisone; 28 times more potent than hydrocortisone; and 35 times more potent than cortisone.

In Dosage Reduction

Thanks to this unprecedented potency, DECADRON is "highly effective in suppressing the manifestations of rheumatoid arthritis when administered in remarkably small daily milligram doses."[3] In a number of cases, doses as low as 0.5-0.8 mg. proved sufficient for daily maintenance. The average maintenance dosage in rheumatoid arthritis is about 1.5 mg. daily.

In Elimination and Reduction of Side Effects

Virtual absence of diabetogenic activity, edema, sodium or water retention, hypertension, or psychic reactions has been noted with DECADRON.[1,2,3,4] Other "classical" reactions were less frequent and less severe. DECADRON showed no increase in ulcerogenic potential, and digestive complaints were rare. Nor have there been any new or "peculiar" side effects, such as muscle wasting, leg cramps, weakness, depression, anorexia, weight loss, headache, dizziness, tachycardia or erythema. Thus DECADRON introduces a new order of magnitude in safety, unprecedented in corticosteroid therapy.

In Therapeutic Effectiveness

With DECADRON, investigators note "a decided intensification of the anti-inflammatory activity"[3] and antirheumatic potency.[4] Clinically, this was manifested by a higher degree of improvement in many patients, previously treated with prednisteroids,[3] and by achievement of satisfactory control in an impressive number of recalcitrant cases.[3,4]

In Therapeutic Range

More patients can be treated more effectively with DECADRON. Its higher anti-inflammatory potency frequently brings relief to cases resistant to other steroids. Virtual freedom from diabetogenic effect in therapeutic dosage permits treatment of many diabetics without an increase in insulin requirements. Absence of hypertension and of sodium and fluid retention allows effective therapy of many patients with cardiovascular disorders. Reduction in the incidence and severity of many side effects extends the benefits of therapy to numerous patients who could not tolerate other steroids. And a healthy sense of well-being, reported by nearly all patients on DECADRON, assures greater patient cooperation.

References:

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2. Bunim, J.J., et al.: Arthr. & Rheum. 1:313 (Aug.) 1958.
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4. Bunim, J.J., et al.: Paper read before the Am. Rheum. Assoc., June 21, 1958, San Francisco, Cal.

To treat more patients more effectively in all allergic and inflammatory disorders amenable to corticosteroid therapy

DOSAGE AND ADMINISTRATION

With proper adjustment of dosage, treatment may ordinarily be changed over to DECADRON from any other corticosteroid on the basis of the following milligram equivalence:

One 0.75 mg. tablet of DECADRON (dexamethasone) replaces:

One 4 mg.	One 5 mg.	One 20 mg.	One 25 mg.
tablet of methylprednisolone or triamcinolone	tablet of prednisolone or prednisone	tablet of hydrocortisone	tablet of cortisone

SUPPLIED:

As 0.75 mg. scored pentagon-shaped tablets; also as 0.5 mg. tablets to provide maximal individualized flexibility of dosage adjustment.

Detailed literature is available to physicians on request.

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DEXAMETHASONE

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Unusual Antibacterial and Anti-infective Properties—More soluble in acid urine[1] . . . higher and better sustained plasma levels than any other known and useful antibacterial sulfonamide.[2]

Unprecedented Low Dosage—Less sulfa for the kidney to cope with . . . yet fully effective. A single daily dose of 0.5 to 1.0 Gm. maintains higher plasma levels than 4 to 6 Gm. daily of other sulfonamides—a notable asset in prolonged therapy.[2]

Dosage: The recommended adult dose is 1 Gm. (2 tablets) the first day, followed by 0.5 Gm. (1 tablet) every day thereafter, or 1 Gm. every other day for mild to moderate infections. In severe infections where prompt, high blood levels are indicated, the initial dose should be 2 Gm. followed by 0.5 Gm. every 24 hours.

KYNEX—WHEREVER SULFA THERAPY IS INDICATED

Tablets: Each tablet contains 0.5 Gm. (7½ grains) of sulfamethoxypyridazine. Bottles of 24 and 100 tablets.

Syrup: Each teaspoonful (5 cc.) of caramel-flavored syrup contains 250 mg. of sulfamethoxypyridazine. Bottle of 4 fl. oz.

references:
1 Grieble, H.G., and Jackson, G.G.: Prolonged Treatment of Urinary-Tract Infections with Sulfamethoxypyridazine. *New England J. Med.* 258:1-7, 1958
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LEDERLE LABORATORIES, a Division of AMERICAN CYANAMID COMPANY, Pearl River, New York

Lederle

*Reg. U.S. Pat. Off.

Oxyuris Infestation

(Continued from Page 1219)

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Operation for Endometriosis

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Louis H. Bauer, M.D., Secretary General of the World Medical Association, has just returned from a semi-official visit to the Cuban Medical Association where he participated in the official opening of a new 22-story headquarters building. He said the medical profession in Cuba needs the support of the World Medical Association in its efforts to provide medical services to anyone needing aid on the basis of caring first for those in need of these services regardless of race, color, creed or party politics. He cited the fact that in the eastern provinces doctors are forbidden to give medical aid to the revolutionists. If they do so, they are warned to leave within two hours or be killed.

V. L. Fisher, M.D., has returned to his practice in Morganfield where he will limit his practice to general medicine and general surgery.

Robert Wheeler, M.D., has opened offices in Georgetown after practicing in Lynch for six months. A native of Middlesboro, Doctor Wheeler was graduated from the University of Louisville School of Medicine. He served two years in the Medical Corps of the Air Force before beginning the practice of medicine in Lynch.

George W. Cheek, Jr., M.D., has opened an office in Louisville for the practice of general surgery. A native of Bowling Green, Doctor Cheek graduated from the University of Pennsylvania Medical School in 1953, interned at University of Pennsylvania Hospital and took his residency training at the University of Michigan. Before taking his medical training he had a tour of duty with the United States Navy.

John W. Ragsdale, Jr., M.D., a graduate of the medical school of the University of Tennessee in 1957, has started a general practice in Fulton at the Hillview Hospital. Doctor Ragsdale interned at John Gaston Hospital in Memphis.

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could you detect the uveitis patient on Medrol*?

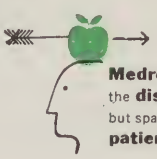
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First, because he's more than likely symptom-free.

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Even your practiced clinical eye would find it difficult to spot someone else's Medrol patient.

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In the Books

(Continued from Page 1188)

hypotensive drugs is stressed as a very essential part of the treatment of toxemia.

In summary, this is a complete coverage of the problem of toxemia of pregnancy which can be read in less than two hours. The latest ideas of etiology, pathology and treatment are discussed.

The section on Fibromyomas of the Uterus is also a complete discussion of this topic. There is nothing new here, most everything can be found in any standard textbook of gynecology. The section of myomectomy is good though, and urges use of this procedure in properly indicated cases.

Glenn W. Bryant, M.D.

Public Health Page

(Continued from Page 1190)

Originally this Amendment, in the form of Public Law 482, was passed for a period expiring June 30, 1959. At the last session of Congress authorization for the extension of this Law was made until June 30, 1964. Thus, it is to be noted that all facilities under both Public Law 725 and Public Law 482 are now included under the Hospital and Medical Facilities Survey and Construction Program. This Program, thus, now includes what formerly was Public Law 725 and Public Law 482, and is authorized to last until June 30, 1964.

It is to be noted that in the State of Kentucky, since the beginning of the Program, Federal funds have been allocated to communities for all types of medical facilities as authorized under the Acts.

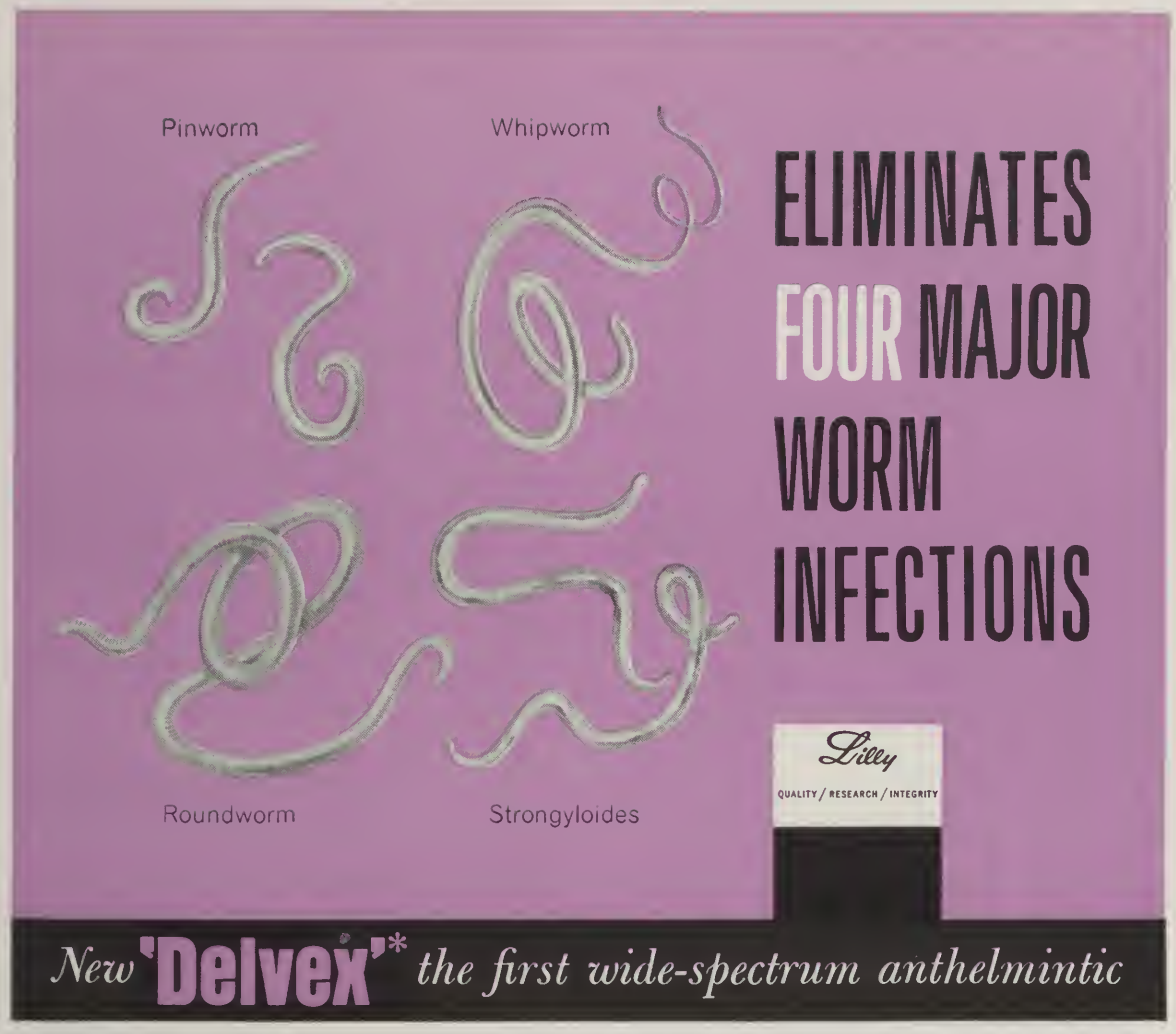
The accompanying table, which is self-explanatory, will show the total cost, Federal share, and amounts allocated to various types of areas throughout Kentucky.

The State Authority, as designated by law, is the State Department of Health under the Commissioner of Health. The Division of Hospital and Medical Facilities is a branch of the office of the Commissioner of Health, and acts for the Commissioner, under his supervision and approval, in carrying out all the provisions of the above mentioned two Federal Acts.

A course in industrial health for registered nurses only is being offered for the fifth consecutive year by the Institute of Industrial Health of the University of Cincinnati during the week of March 2. The faculty, under the Directorship of Robert Kehoe, M.D., will include the staff of the Institute and selected guest instructors. The course's objective is to assist in the development of the administrative abilities of the industrial nurse. Registration fee is $45. For bulletins and additional information write: Secretary, Institute of Industrial Health, Kettering Laboratory, Eden and Bethesda Ave., Cincinnati 19, Ohio.



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Pinworm	Whipworm
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- It also inhibits, and sometimes eliminates, hookworm infection.
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- It is the first effective and practicable agent for the oral treatment of strongyloidiasis and whipworm infection.
- No adjunctive measures are needed with 'Delvex' therapy.

Further information and clinical reports may be obtained from your Lilly representative or by writing to our Medical Department.

*'Delvex' (Dithiazanine Iodide, Lilly)
1. Swartzwelder, J. C., et al.: J. A. M. A., 165:2063, 1957.

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1958 CONSTITUTION AND BY-LAWS OF THE KENTUCKY STATE MEDICAL ASSOCIATION

Revised September 24, 1958

CONSTITUTION

Article I. Name of the Association
Article II. Purpose of the Association
Article III. Component Societies
Article IV. Composition of the Association
Article V. House of Delegates
Article VI. Sections and District Societies
Article VII. Sessions and Meetings
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BY-LAWS

Chapter I. Membership
Chapter II. Annual and Special Sessions of the Association
Chapter III. General Meeting
Chapter IV. House of Delegates
Chapter V. Election of Officers
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Chapter VII. The Council
Chapter VIII. Committees
Chapter IX. Assessments and Expenditures
Chapter X. Rules of Conduct
Chapter XI. Rules of Order
Chapter XII. County Societies
Chapter XIII. Amendments

CONSTITUTION

Article I. Name of the Association

The name and title of this organization shall be the Kentucky State Medical Association.

Article II. Purpose of the Association

The purpose of the Association shall be to federate and bring into compact organization the entire medical profession of the State of Kentucky and to unite with similar associations in other states to form the American Medical Association, with a view to the extension of medical knowledge, and the advancement of medical science and charity, to the elevation of the standard of medical education and to the enactment and enforcement of just medical laws; the promotion of friendly intercourse among physicians and to the guarding and fostering of their material interest; to protect the members thereof against unjust assaults upon their professional care, skill or integrity; and to the enlightenment and direction of public opinion in regard to the great problem of state medicine so that the profession shall become more capable and honorable within itself and more useful to the public in the prevention and cure of disease and in prolonging and adding comfort to life.

Article III. Component Societies

Component societies shall consist of those medical societies which hold charters from this Association.

Article IV. Composition of the Association

The Association shall consist of the members of the component societies and the House of Delegates shall have authority to adopt By-laws regulating the admission and classification of members as deemed advisable.

Article V. House of Delegates

Section 1. The House of Delegates shall be the legislative and business body of the Association and shall have power, by a two-thirds vote of all the delegates present at that session, to adopt by-laws to carry out the provisions of this Constitution.

Section 2. Delegates shall be members of and elected by component societies in accordance with the By-laws. Officers of the Association, Delegates and Alternate Delegates to the American Medical Association, and the five immediate Past Presidents shall be exofficio members of the House of Delegates and entitled to vote.

Section 3. The speaker or vice-speaker shall preside during the meetings of the House of Delegates. The presiding officer shall not be entitled to a vote except in the event of a tie vote.

Section 4. The House of Delegates shall be the final judge as to the qualification of its members.

Article VI. Sections and District Societies

The House of Delegates may provide a division of the scientific work of the Association into appropriate Sections and for the organization of such Councilor District Societies as will promote the best interest of the profession, such societies to be composed exclusively of members of component societies.

Article VII. Sessions and Meetings

The Association shall hold an annual session and such special sessions as may be desirable in accordance with the by-laws of the Association.

Article VIII. Officers

Section 1. The officers of this Association shall be a President, a President-Elect, three Vice-Presidents, a Secretary, a Treasurer, a Speaker and Vice-Speaker of the House of Delegates, and a Councilor from each Councilor District that may be established and such other officers as provided for in the by-laws.

Section 2. The officers of the Association shall serve for the term of office and subject to provisions as specified in the by-laws.

Section 3. All officers shall serve until their successors have been elected and installed.

Section 4. The officers of the Association shall be elected by the House of Delegates at the annual session of the Association and shall take office on the last day of the annual meeting.

Article IX. Funds and Expenses

Funds for meeting the expenses of the Association shall be arranged for by the House of Delegates by an equal per capita assessment upon each county (component) society to be fixed by the House of Delegates by voluntary contribution and from other sources of revenue. Funds may be appropriated by the House of Delegates to defray the expenses of the Annual Session, for publication and for such other purposes as will promote the welfare of the Association and profession.

Article X. Referendum

The General Meeting of the Association may, by a two-thirds vote, order a general referendum upon any question pending before the House of Delegates, and the House of Delegates may, by a similar vote of its own members or after a like vote of the General Meeting, submit any such question to the membership of the Association for a final vote; and if the persons voting shall comprise a majority of all the members, a majority of such vote shall determine the question and be binding upon the House of Delegates.

Article XI. The Seal

The Association shall have a common Seal with power to break, change or renew the same at pleasure.

Article XII. Amendments

The House of Delegates may amend any article of this Constitution by a two-thirds vote of the delegates registered at the Annual Session, provided that such amendment shall have been presented in open meeting at the previous Annual Session, and that it shall have been sent officially to each component county society at least two months before the session at which final action is to be taken.

Article XIII. Meaning of Term "County Societies"

Anywhere in the Constitution, Articles of Incorporation, or Bylaws in which the term county society, or county societies, component county society or component medical society appears, it shall be construed to mean component society.

BY-LAWS

Chapter I. Membership

Section 1. A member of this Association must be a member of one of the component societies and when certified to the Secretary of the Association as a member of a component society, properly classified as to type of membership, and when the dues pertaining to his membership classification have been received by the Secretary of the Association, the name of the member shall be included in the official roster of the Association and the member shall be entitled to all the privileges of his class membership, provided, however, that members in good standing from other state societies may, if admitted to membership by the county society, be accepted by KSMA for membership without paying dues for the remainder of the calendar year in which the transfer is made.

Section 2. Membership in the Association shall be divided into six classes, to wit: Active, Associate, Inactive, Emeritus, Student, and Honorary.

(a) Active Members. The active membership of the Association shall consist of the active members of the various component county medical societies. To be eligible for active membership in any component county society, the applicant must be a doctor of medicine of good moral, ethical, and professional standing, who is licensed to practice medicine in Kentucky.

(b) Associate Members. The associate membership of the Association shall consist of the associate members of the various component county medical societies. To be eligible for associate membership in any component county society, the applicant must be ineligible for active membership and qualify under one or more of the following groups:

(1) Medical officers of the United States Army, Navy, Air Force, Veterans Administration, Public Health Service, or other governmental service while on duty in the State.

(2) Interns, residents or teaching fellows who are doctors of medicine and who have complied with all pertinent regulations of the State Board of Health.

County societies may also invite dentists, pharmacists, funeral directors, or other professional persons to become associate members.

Associate Members shall not have the right to vote nor to hold office, but shall receive The Journal and other publications of the Association.

(c) Inactive Members. The inactive membership of the Association shall consist of the inactive members of the various component county medical societies. Any doctor of medicine licensed to practice medicine in Kentucky who is not engaged in the practice of medicine but who is otherwise eligible for active membership in the Association may be admitted to inactive membership by any component county society. Inactive members shall not have the right to vote nor hold office, but shall receive The Journal and other publications of the Association.

(d) Emeritus Members. Component societies may elect as a member-emeritus any doctor of medicine who has retired from active practice and who has previously maintained active membership in good standing in his own society for twenty years or more. Emeritus members shall not have the right to vote nor to hold office and shall not pay dues, nor shall they be entitled to the benefits of Chapter VII, Section 10 of these by-laws. They shall receive The Journal and other publications of the Association.

(e) Student Members. Any student in an accredited medical school in Kentucky or any resident of Kentucky who is a student in any accredited medical school in the United States shall be eligible for student membership. Student members shall not have the right to vote nor hold office. They may apply directly to the State Association for membership and be assigned to the county society of their choice. Student members shall receive The Journal of the Association. The membership year for student members shall run from September 1 to August 31 of each year.

(f) Honorary Members. Any physician possessed of scientific attainments who is a member of a constituent state medical association and who has participated in the program of the scientific session and who is not a citizen of Kentucky may by unanimous vote of the House of Delegates be elected to honorary membership. Honorary members shall be entitled to the privilege of the floor in all scientific sessions.

Section 3. Guests of Honor. Any distinguished physician not a resident of this State may become a guest of honor during any annual session upon invitation of the Association or its Council and shall be accorded the privilege of participating in all of the scientific work of that session.

Section 4. The name of a physician upon the properly certified roster of members or list of delegates of a chartered county society which has paid its annual assessment, shall be prima facie evidence of his right to register at the Annual Session in the respective bodies of this Association.

Section 5. No persons who are under sentence of suspension or expulsion from any component society of this Association, or whose name has been dropped from its rolls of membership, shall be entitled to any of the rights or benefits of this Association or its proceedings until such time as he has been relieved of such liability.

Section 6. Each member in attendance at the Annual Session shall enter his name on the registration book indicating the component society of which he is a member. When his right to membership has been verified by reference to the roster of the society, he shall receive a badge which shall be evidence of his right to all the privileges of membership at that session. No member or delegate shall take part in any of the proceedings of an annual session until he has complied with the provision of this section.

Chapter II. Annual and Special Sessions of The Association

The Association shall hold an annual session and such special session at such times and places as may be determined by the House of Delegates. All sessions shall be limited to the scientific, educational, legislative, economic and business activities of the Association. Such special sessions shall be held in accordance with the provisions of Chapter IV, Section I of the by-laws.

Chapter III. General Meeting

The General Meeting shall include all registered members and guests. Although only active members shall have the right to vote on pending questions all members shall have equal rights to participate in the proceedings and discussions. Each General Meeting shall be presided over by the President or in his absence or disability or upon his request, by the

President Elect or one of the Vice Presidents. The annual address of the President shall be delivered at such time and place during the annual session as the Council may direct. The entire time of the sessions, as far as may be, shall be devoted to papers and discussions related to scientific medicine.

Chapter IV. House of Delegates

Section 1. The House of Delegates shall meet annually at the time and place of the Annual Session of the Association and shall so fix its hours of meeting as not to conflict with the first General Meeting of the Association, or with the meeting held for the address of the President so as to give delegates an opportunity to attend the other scientific proceedings and discussions so far as is consistent with their duties. But if the business interest of the association and profession require, it may meet in advance or remain in session after the final adjournment of the General Meeting. The House of Delegates may be called into special session by the President with the approval of the Council and a special session of the House of Delegates shall be called by the President on a written request of the delegates representing fifty or more component county societies. When such special session is called, the Secretary shall mail a notice of the time and place and purpose of such meeting to the last known address of each member of the House of Delegates at least ten days before such special session.

Section 2. In the event there is no duly authorized delegate in attendance at the regular meeting of the House of Delegates the President shall consult any duly elected officer of the component society who is in attendance and with the approval of the Credentials Committee may appoint any active member of the component society in attendance at the meeting as the delegate. In the event there is no duly elected officer of the component society in attendance, the President may make the said appointment with the approval of the Credentials Committee. All appointments made shall also be with the approval of the House of Delegates.

Section 3. A majority of the registered delegates shall constitute a quorum and all of the meetings of the House of Delegates shall be open to members of the Association. The House of Delegates shall have the right to go into executive session whenever such action is indicated in the judgment of the House of Delegates, except that active members of the Association shall have the right to attend all executive sessions.

Section 4. Each resolution introduced into the House of Delegates shall be in writing and signed by the author and presented to the Secretary following its introduction. If the author be an individual member, it shall be signed by him. If the author be a group of members, it shall be signed by the authorized spokesman for that group. Immediately after the Delegate has introduced the Resolution, it shall be referred to the proper Reference Committee before action thereon is taken.

Section 5. No new business shall be introduced in the last meeting of the House of Delegates without unanimous consent of the Delegates except when presented by the Council. All new business so presented shall require three-fourths affirmative vote for adoption.

Section 6. It shall, through its officers, Advisory Council, and otherwise, give diligent attention to and foster the scientific work and spirit of the Association, and shall constantly study and strive to make each Annual Session a stepping stone to further ones of higher interest.

Section 7. It shall consider and advise as to material interest of the profession, and of the public in those important matters wherein it is dependent upon the profession, and shall use its influence to secure and enforce all proper medical and public health legislation, and to diffuse popular information in relation thereto.

Section 8. It shall make careful inquiry into the condition of the profession of each county in the State, and shall have authority to adopt such methods as may be deemed most efficient for building up and increasing the interest in such county societies as already exist and for organizing the profession in counties where societies do not exist. It shall especially and systematically endeavor to promote friendly intercourse between physicians of the same locality and shall continue these efforts until every physician in every county of the State who will agree to abide by the constitution, bylaws and other rules and regulations of the Association and the appropriate component society, has been brought under medical society influence.

Section 9. It shall encourage postgraduate work in medical centers as well as home study and research and shall endeavor to have the results of the same utilized and intelligently discussed in the county societies.

Section 10. It shall elect representatives to the House of Delegates of the American Medical Association in accordance with the Constitution and By-Laws of that body.

Section 11. It shall upon application provide and issue charters to county societies organized to conform to the spirit of the Constitution and By-Laws.

Section 12. In sparsely settled sections two or more County Societies may join for scientific programs, the election of officers, and such other matters as they may deem advisable. The County Society thus combined shall not lose any of its privileges and representation. The active members of each County Society shall annually elect at least a Secretary and a Delegate for the transaction of its business with the State Association.

Section 13. The state shall be divided into the following councilor districts:

No. 1—Ballard, Calloway, Carlisle, Fulton, Graves, Hickman, Livingston, McCracken, and Marshall.

No. 2—Daviess, Hancock, Henderson, McLean, Ohio, Union, and Webster.

No. 3—Caldwell, Christian, Crittenden, Hopkins, Lyon, Muhlenberg, Todd, and Trigg.

No. 4—Breckinridge, Bullitt, Grayson, Green, Hardin, Hart, Larue, Marion, Meade, Nelson, Spencer, Taylor, and Washington.

No. 5—Jefferson.

No. 6—Adair, Allen, Barren, Butler, Cumberland, Edmonson, Logan, Metcalf, Monroe, Simpson, and Warren.

No. 7—Anderson, Carroll, Franklin, Gallatin, Grant, Henry, Oldham, Owen, Shelby, and Trimble.

No. 8—Boone, Campbell and Kenton.

No. 9—Bath, Bourbon, Bracken, Fleming, Harrison, Mason, Nicholas, Pendleton, Scott, and Robertson.

No. 10—Fayette, Jessamine, and Woodford.

No. 11—Clark, Estill, Jackson, Lee, Madison, Menifee, Montgomery, Owsley, Powell, and Wolfe.

No. 12—Boyle, Casey, Clinton, Garrard, Lincoln, McCreary, Mercer, Pulaski, Rockcastle, Russell, and Wayne.

No. 13—Boyd, Carter, Elliott, Greenup, Lawrence, Lewis, Morgan, and Rowan.

No. 14—Breathitt, Floyd, Johnson, Knott, Letcher, Magoffin, Martin, Perry, and Pike.

No. 15—Bell, Clay, Harlan, Knox, Laurel, Leslie, and Whitley.

Councilor district meetings may be held as desired, and District Medical Associations may be organized as desired according to the districts outlined above.

Section 14. It shall have authority to appoint committees for special purposes from among members of the Association who are not members of the House of Delegates and such committees may report to the

House of Delegates in person, and may participate in the debate thereon.

Section 15. It shall approve all memorials and resolutions issued in the name of the Association before the same shall become effective.

Section 16. A digest of proceedings of the House of Delegates shall be published in the Journal of the Association.

Chapter V. Election of Officers

Section 1. The President-Elect and the Vice-Presidents shall be elected for a term of one year. The Speaker and Vice-Speaker of the House of Delegates shall be elected for a term of three years. The Secretary and Treasurer shall be elected for a term of five years. The Councilors shall be elected for a term of three years and shall be limited to serving for not more than two consecutive terms. The terms shall be so arranged that one-third of the terms expire each year, insofar as possible. No member shall be eligible for the office of President, President-Elect, Vice-President, Speaker or Vice-Speaker of the House of Delegates, or Councilor who has not been an active member of the Association for at least five years.

Section 2. All elections shall be by secret ballot, and a majority of the votes cast shall be necessary to elect, provided, however, that when there are more than two nominees the nominee receiving the least number of votes on the first ballot shall be dropped and the balloting continue until an election occurs in like manner.

Section 3. Any member known to have directly or indirectly solicited votes for, or sought any office within the gift of this Association shall be ineligible for any office for two years.

Section 4. The election of officers shall be held during the closing session at the regular annual meeting of the House of Delegates.

Section 5. During the last session of the House of Delegates the Speaker of the House of Delegates shall submit to the members of the House of Delegates a list of ten names from which, by ballot, the House of Delegates shall select five members to serve as the nominating committee for the next year. The five names receiving the most votes shall form the committee. The Committee shall select one of its members as chairman at an organization meeting held during the County Society Officers' Conference, or at some other appropriate place designated by the Council at least four months before the Annual Meeting. The Committee, in addition to such other sessions as it may choose to hold, will schedule an open meeting immediately after the close of the first session of the House of Delegates at each Annual Meeting. This open session shall be held in the same meeting hall, shall receive broad publicity, and those who have business to discuss with the Committee shall have a hearing. Following this meeting, the Committee shall announce its final recommendations at the beginning of the second scientific session the following day, the Committee submitting one or more names for each officer to be elected. The House of Delegates will vote on the nominees at its second session. Additional nominations may be made from the floor by submitting the nominations without discussion or comment.

Section 6. The Delegates from the counties in each Councilor District shall form the Nominating Committee for the purpose of nominating a Councilor for the Councilor District concerned. This committee shall hold a meeting open to all active members of Councilor District concerned who are in attendance at the meeting for the purpose of discussing the nomination for the Councilor to serve the District. Additional nominations may be made from the floor by any member of the House of Delegates when the Nominating Committee makes its report to the House of Delegates.

Chapter VI. Duties of Officers

Section 1. The President shall preside at all general meetings of the Association and shall appoint all committees not otherwise provided for. He shall deliver an annual address at such time as may be arranged and shall perform such other duties as custom and parliamentary usage may require. He shall be the real head of the profession of the State during his term of office and so far as practicable, shall visit by appointment, the various sections of the State and assist the Councilors in building up the county societies and in making their work more practical and useful.

Section 2. The President Elect shall be ex officio a member of the Committee on Scientific Assembly and Arrangements, and of the House of Delegates with the right to vote, and shall assist the President in visitation of county and other meetings. He shall become President of the Association at the next annual meeting of the Scientific Session following his election as President Elect. In the event of death, resignation, or if he becomes permanently disqualified, his successor shall be elected by the House of Delegates and shall be installed as President of the Association at the next annual meeting of the Scientific Session of the Association.

Section 3. The Vice-Presidents shall assist the President in the discharge of his duties. In the event of his death, resignation, or removal, the Council shall elect one of the Vice-Presidents to succeed him.

Section 4. The Speaker of the House of Delegates of the Association shall preside at all meetings of the House of Delegates. He shall appoint all committees for the House of Delegates with the approval of the House of Delegates. He shall be an ex-officio member of all said committees. He shall perform such other duties as custom and parliamentary usage may require.

Section 5. The Vice-Speaker shall assume the duties of the Speaker in his absence, and shall assist the Speaker in the performance of his duties. In the event of the death, resignation, or removal of the Speaker, the Vice-Speaker shall automatically become Speaker of the House of Delegates.

Section 6. The Secretary shall advise the Executive Secretary in all secretarial matters of this Association and shall act as the corporate secretary insofar as the execution of official documents or institution of official actions are required. He shall perform such duties as are placed upon him by the Constitution and By-Laws, and in the event of the death, resignation or removal of the Executive Secretary, shall assume the duties of that office until the vacancy is filled.

Section 7. The Treasurer shall demand and receive all funds due the Association, together with the bequests and donations. He shall, under the direction of the House of Delegates sell or lease any real estate belonging to the Association and execute the necessary papers and shall, subject to such direction, have the care and management of the fiscal affairs of the Association. All vouchers of the Association shall be signed by the Secretary or the Executive Secretary and shall be counter-signed by the Treasurer of the Association. Under unusual circumstances, when one or more of the above-named officials are not readily available, the President of the Association or the Chairman of the Council is authorized to sign the vouchers, provided that in any event all vouchers of the Association shall bear a signature and a countersignature. All five officials shall be required to give bond in an amount to be determined by the Council. The Treasurer shall subject his accounts to an annual audit under the direction of the Council. He shall render an annual account of his doings and the state of all Association funds.

Chapter VII. Council

Section 1. The Council shall be the executive body of the House of Delegates and between sessions of the House of Delegates shall exercise the powers con-

ferred on the House of Delegates by the Constitution and Bylaws. The Council shall consist of the duly elected Councilors and the President, the President-elect, the three Vice-presidents, the immediate Past-president, the Speaker of the House of Delegates, the Secretary, the Treasurer, and the Delegates to the American Medical Association. The Executive Committee of the Council shall consist of the President, the President-elect, and the Secretary of the Association, together with the Chairman of the Council, Vice-chairman of the Council, and two additional councilors to be elected annually by the Council. A majority of the full Council, including ex officio members, to wit, 14, and a majority of the full Executive Committee, including ex officio members, to-wit, 4, shall constitute a quorum for the transaction of all business by either body. Between sessions of the Council the Executive Committee shall exercise all of the powers belonging to the Council except those powers specifically reserved by the Council to itself.

Section 2. The Council shall hold daily meetings during the annual session of the Association and at such other times as necessity may require, subject to the call of the Chairman or on petition of three councilors. It shall meet on the last day of the Annual Session of the Association for reorganization and for the outlining of the work for the ensuing year. At this meeting it shall elect a chairman and secretary, and it shall keep a permanent record of its proceedings. It shall, through its Chairman, make an annual report to the House of Delegates at such time as may be provided which report shall include an audit of the account of the Secretary and Treasurer and other agents of this Association and shall also specify the character and cost of all the publications of the Association during the year, and the amounts of all other property belonging to the Association, or under its control, with such suggestions as it may deem necessary. In the event of a vacancy in any office the Council may fill the same until the annual election.

Section 3. Each Councilor shall be organizer, peacemaker and censor for his district. He shall visit each county in his district at least once a year for the purpose of organizing component societies where none exist, for inquiring into the condition of the profession and for improving and increasing the zeal of the county societies and their members. He shall likewise hold at least one councilor district meeting each year in order to afford a forum for the exchange of views on problems relating to organized medicine and for postgraduate scientific study. The necessary traveling expenses incurred by a Councilor in the line of his duties herein imposed may be allowed by the House of Delegates upon a proper itemized statement, but this shall not be construed to include his expenses in attending the Annual Session of the Association.

Section 4. Collectively the Council shall be the Board of Censors of the Association. It shall consider all questions involving the right and standing of members, whether in relation to other members, to the component societies, or to this Association. All questions of an ethical nature brought before the House of Delegates of the General Meeting shall be referred to the Council without discussion. It shall hear and decide all questions of discipline affecting the conduct of members or a county society upon which appeal is taken from the decision of an individual Councilor. Its decision in all such cases shall be final.

Section 5. The Council shall have the right to communicate the views of the profession and of the Association in regard to health, sanitation, and other important matters to the public and the lay press. Such communications shall be signed by the President of the Association and the Chairman of the Council as such.

Section 6. The Journal of the Kentucky State Medical Association shall be the official organ of the Association and shall be published under the supervision of the Council. The Editor of the Journal shall be elected by the Council. All money received by the Journal or any member of its staff shall be paid to the Treasurer of the Association on the first of each month. The Council shall provide for and superintend the publication and distribution of all proceedings, transactions, and memoirs of the Association, and shall have authority to appoint such assistants to the Editor as it deems necessary.

Section 7. All reports on scientific subjects and all scientific discussions and papers read before the Association shall be referred to the Journal of the Kentucky State Medical Association for publication. The editor, with the consent of the Councilor for the District in which he resides, may curtail or abstract papers or discussions, and the Council may return any paper to its author which it may not consider suitable for publication.

Section 8. All commercial exhibits during the Annual Session shall be within the control and direction of the Council.

Section 9. In the event the office of one of the District Councilors is vacated between the meetings of the House of Delegates, the President of the Association may call a meeting of the delegates of record in the Headquarters Office from the counties of that district for the purpose of submitting one or more nominees as candidates to fill the office until the next meeting of the House of Delegates. The name or names of the nominee or nominees shall be submitted to the Council, which may elect a Councilor from them to serve until the next meeting of the House of Delegates.

Section 10. A Medico-Legal Administrator shall be appointed by the Council of the Association to serve for a term of three years. The Executive Committee of the Council shall act in an advisory capacity to the Administrator. The Association, through the Administrator shall, upon the request of any member in good standing who is a defendant in a professional liability suit, provide such member with the consultative service of competent legal counsel selected by the Administrator acting under the general direction of the Executive Committee. In addition, the Association may, upon application to the Council outlining unusual circumstances justifying such action, provide such member with the services of an attorney selected by the Council to defend such suit through one court.

Section 11. The Council shall employ an Executive Secretary whose principal duty shall be to carry out and execute the policies established by the House of Delegates and the Council. His compensation shall be fixed by the Council. The Executive Secretary shall act as general administrative officer and business manager of the Association and shall perform all administrative duties necessary and proper to the general management of the Headquarters Office, except those duties which are specifically imposed by the Constitution and By-Laws upon the officers, councilors, committees, boards, and other representatives of the Association. He shall refer to the various elected officials all administrative questions which are properly within their jurisdiction.

He shall attend the annual sessions, the meetings of the House of Delegates, the meetings of the Council, as many of the committee meetings as possible, and shall keep separately the records of their respective proceedings. He shall, at all times, hold himself in readiness to advise and aid, so far as is possible and practicable, all officers and committees of the Association in the performance of their duties and in the furtherance of the purposes of the Association. He shall be allowed traveling expenses to the extent approved by the Council.

He shall be the custodian of the general papers and records of the Association (including those of the Treasurer) and shall conduct the official correspondence of the Association. He shall notify all members of meetings, officers of their election, and committees of their appointments and duties.

He shall account for and promptly turn over to

the Treasurer all funds of the Association which come into his hands. It shall be his duty to receive all bills against the Association, to investigate their fairness and correctness, to prepare vouchers covering the same, and to forward them to the Treasurer for appropriate action. He shall keep an account with the component societies of the amounts of their assessments, collect the same, and promptly turn over the proceeds to the Treasurer. He shall, within thirty days preceding each annual session, submit his financial books and records to a certified accountant, approved by the Council, whose report shall be submitted to the House of Delegates.

He shall keep a card index register of all practitioners of the State by counties, noting on each his status in relation to his county society and upon request shall transmit a copy of this list to the American Medical Association.

He shall act as Managing Editor of the Journal of the Kentucky State Medical Association under supervision of the Council and in a similar capacity to the extent that other publications are authorized by the House of Delegates.

He shall perform such additional duties as may be required by the House of Delegates, the Council, or the President, and shall employ such assistants as the Council may direct. He shall serve at the pleasure of the Council, and in the event of his death, resignation, or removal, the Council shall have the power to fill the vacancy. From time to time, or as directed by the Council, he shall make written reports to the Council and House of Delegates concerning his activities and those of the Headquarters Office.

Chapter VIII. Committees

Section 1. The Standing Committees shall be as follows:

A Committee on Scientific Assembly and Arrangements
A Committee on Public Information and Service
A Committee on Medical Education and Economics
A Committee to Study Constitution and By-Laws
A Legislative Committee

and such other committees as may be necessary. The Headquarters Office at 1169 Eastern Parkway, Louisville 17, Kentucky, shall be the headquarters for all committees and activities of the Association except as may be specifically authorized by the Executive Committee. Committees shall be appointed by the President of the Association in conference with the Secretary unless otherwise specified. The President, Secretary and General Manager, and Executive Secretary shall be ex-officio members of all committees serving without power to vote except as otherwise specified.

Section 2. The Committee on Scientific Assembly and Arrangements shall consist of five members. The President of the Association shall be a member and Chairman of the Committee. The President-Elect shall be a member of the Committee and Vice Chairman thereof. The remaining three members shall serve for terms of three years each, with the term of one member expiring each year and the vacancy filled by appointment of the President. The Chairman of the Committee on Scientific Exhibits and the Chairman of the Committee on Technical Exhibits shall be ex-officio members of the Committee. The Committee shall determine the character and scope of the scientific proceedings of the Association subject to the constitution and by-laws and the instructions of the House of Delegates or of the Council, and to that end may invite the Chairman of its subcommittee to meet and consult with it. Thirty days previous to each annual session it shall prepare and issue a program announcing the order in which papers, discussions, and other business shall be presented, which program shall be adhered to by the Association as nearly as practicable. No county society as such shall serve as host society to the annual meeting.

Section 3. A Committee on Public Information and Service shall be appointed by the Council of the Association whose members shall serve at the discretion of the Council. The Council will annually designate its chairman. It shall be the duty of this committee to keep in active touch with public opinion. It shall keep the public informed of such developments that will constitute a service to the public. It shall promote such immediate and long-range educational programs, both to the public and within the profession, as are deemed in the best interest of both. Its work shall be done with dignity becoming a great profession and that wisdom which makes effective its work and influence.

Section 4. The Committee on Medical Education and Economics shall be appointed by the Council whose members shall serve at the pleasure of the Council. The Council shall annually designate the chairman of the committee. It shall be concerned with and responsible for all matters of Medical Education and Medical Economics which shall be within the province of the State Medical Association. It shall continually strive to serve as a liaison between the public and the Medical Association in those matters.

Section 5. The Committee to Study the Constitution and By-Laws shall be appointed by the Speaker of the House of Delegates acting in conjunction with the Vice Speaker and the Nominating Committee and shall make a continuing study of the Constitution and By-Laws. The Committee shall annually recommend to the House of Delegates such revisions as changing times and conditions dictate.

Section 6. The Legislative Committee shall be appointed annually by the Council of the Association whose members shall serve at the pleasure of the Council. The Council shall each year designate the chairman of the committee. Under the direction of the Council, it shall represent the Association in securing and enforcing legislation in the interest of public health and the science of medicine.

Chapter IX. Assessments and Expenditures

Section 1. The annual dues for membership in this Association shall be as follows: (1) **Active Members, $50.00,** *except Active Members who devote all of their time to teaching or research and have no private practice, $25.00;* (2) Associate Members, $8.00; (3) Inactive Members, $8.00; (4) Emeritus Members, no dues; (5) Student Members, $1.00; (6) Honorary Members, no dues. Dues fixed by these by-laws shall constitute assessments against the component societies. The Secretary of each county society shall forward its assessment together with its roster of all officers and members, list of delegates, and list of non-affiliated physicians of the county to the Secretary of this Association on the first day of January in each year.

Section 2. Any county society which fails to pay its assessments, or make the report required, on or before the first day of April in each year, shall be held as suspended and none of its members or delegates shall be permitted to participate in any of the business or proceedings of the Association or of the House of Delegates until such requirements have been met.

Section 3. All motions and resolutions appropriating money shall specify a definite amount or so much thereof as may be necessary for the purpose, and must have the prior approval of the Council before they can become effective.

Chapter X. Rules of Conduct

The principles set forth in the Principles of Ethics of the American Medical Association, together with the Constitution and Bylaws of the Association and all duly adopted resolutions of the House of Delegates, shall govern the conduct of members in their relation to each other and to the public.

Chapter XI. Rules of Order

The deliberations of this Association shall be governed by parliamentary usage as contained in Robert's Rules of Order, unless otherwise determined by a vote of its respective bodies.

Chapter XII. County Societies

Section 1. All county societies now in affiliation with the State Association or those that may hereafter be organized in this State, which have adopted principles of organization not in conflict with this Constitution and By-Laws shall upon application to the House of Delegates, receive a charter from and become a component part of this Association.

Section 2. As rapidly as can be done after the adoption of this Constitution and By-Laws, a medical society shall be organized in every county in the state in which no component society exists, and charters shall be issued thereto.

Section 3. Charters shall be issued only upon approval of the House of Delegates and shall be signed by the President and Secretary of this Association. The House of Delegates shall have authority to revoke the charter of any component county society whose actions are in conflict with the letter or spirit of this Constitution and By-Laws.

Section 4. Only one component society shall be chartered in any county except that the House of Delegates may issue a charter to one state-wide society of worthy Negro physicians who are not members of any county society. Membership in the component society thus created shall entitle the members thereof to all the rights and benefits of membership in the Kentucky State Medical Association. When more than one county society exists friendlv overtures and concessions shall be made with the aid of the Councilor of the District if necessary and all of the members brought into one organization. In case of failure to unite, an appeal may be made to the Council, which shall decide what action shall be taken.

Section 5. Each county society shall judge of the qualifications of its own members. All active members of the component county societies shall be active members of the Kentucky State Medical Association.

Section 6. Any physician who may feel aggrieved by the action of the society of the county in refusing him membership, or in suspending or expelling him, shall have the right to appeal to the Council, which upon a majority vote may permit him to become a member of an adjacent county society.

Section 7. In hearing appeals, the Council may admit oral or written evidence as in its judgment will best and most fairly present the facts, but in case of every appeal, both as a Board and as individual councilors in district and county work, effort at conciliation and compromise shall precede all such hearings.

Section 8. When a member in good standing in a component society moves to another county in the State, his name, upon request, shall be transferred without cost to the roster of the county society into whose jurisdiction he moves, if he is admitted to membership therein.

Section 9. A physician living in or near a county line may hold membership in that county most convenient for him to attend, on permission of the county in whose jurisdiction he resides.

Section 10. Each county society shall have general direction of the affairs of the profession in the county, and its influence shall be constantly exerted for bettering the scientific, moral and material conditions of every physician in the county, and systematic efforts shall be made by each member, and by the society as a whole, to increase the membership until it embraces every qualified physician in the county.

Section 11. Frequent meetings shall be encouraged, and the most attractive programs arranged that are possible. The younger members shall be especially encouraged to do post-graduate and original research work, and to give the society the first benefit of such labors. Official positions and other references shall be unstintingly given to such members.

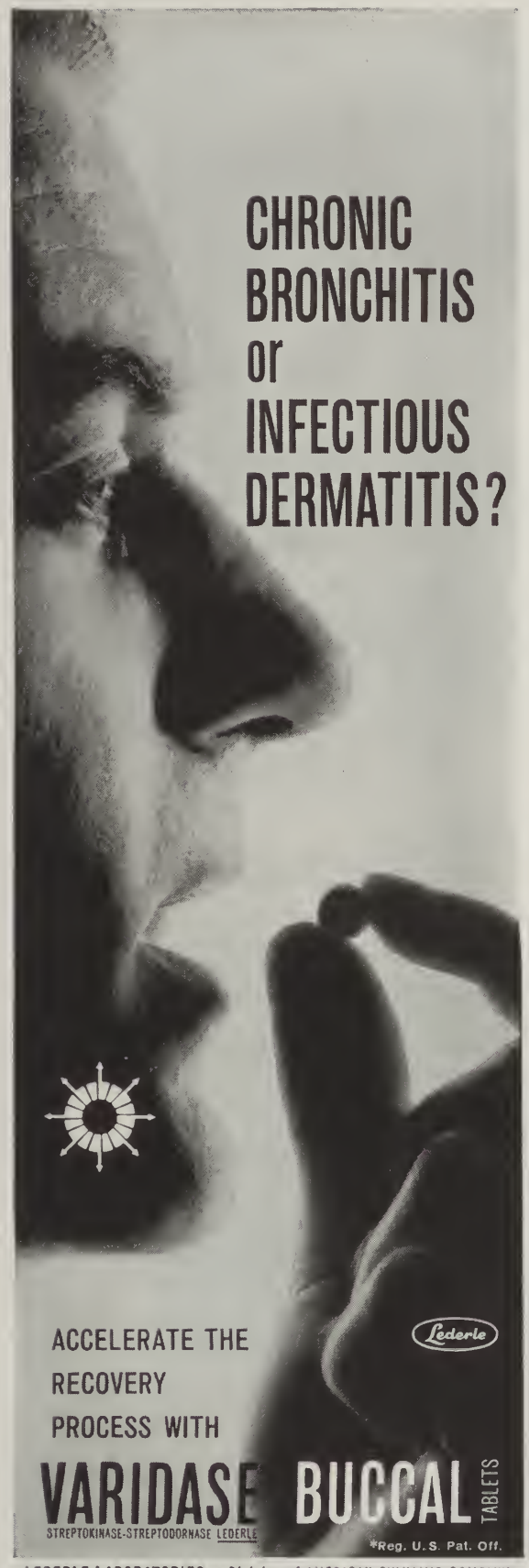
Section 12. At the time of the annual election of officers each component society shall elect a delegate or delegates to represent it in the House of Delegates of the Association. The term of a delegate is from the beginning of the annual meeting of the House to which he was elected to serve to the beginning of the next annual meeting, but it may be for one or more years at the discretion of the county society. Each component society may be represented by one delegate for each 25 members in good standing plus one delegate for one or more members in excess of multiples of 25. Provided, however, that each component society shall be entitled to at least one delegate regardless of the number of members it may have and the secretary of the society shall send a list of such delegates to the secretary of this Association not later than 45 days before the next annual session. It shall be the obligation of the county medical society which elects delegates to serve more than one year to provide the KSMA Headquarters Office with a completed certified list of delegates to represent that county for that particular year.

Section 13. The Secretary of each county society shall keep a roster of its members and a list of non-affiliated registered physicians of the county, in which shall be shown the full name, address, college and date of graduation, date of license to practice in this State, and such other information as may be deemed necessary. He shall furnish an official report containing such information, upon blanks supplied him for the purpose, to the Secretary of this Association, on the first day of January of each year, or as soon thereafter as possible, and at the same time the dues accruing from the annual assessment are sent in. In keeping such roster the Secretary shall note any change in the personnel of the profession by death or by removal to or from the county, and in making his annual report he shall be certain to account for every physician who has lived in the county during the year.

Section 14. The secretary of each county society shall report to the Journal of the Kentucky State Medical Association full minutes of each meeting and forward to it all scientific papers and discussions which the society shall consider worthy of publication.

Chapter XIII. Amendments

These by-laws may be amended by any annual session by a two-thirds vote of all the delegates present at that session, after the amendment has been laid on the table for one day.



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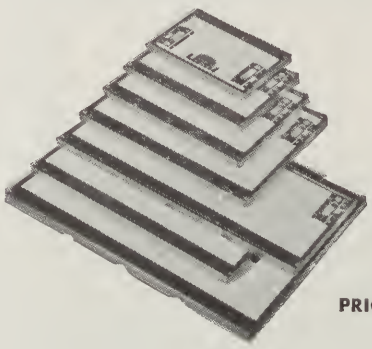
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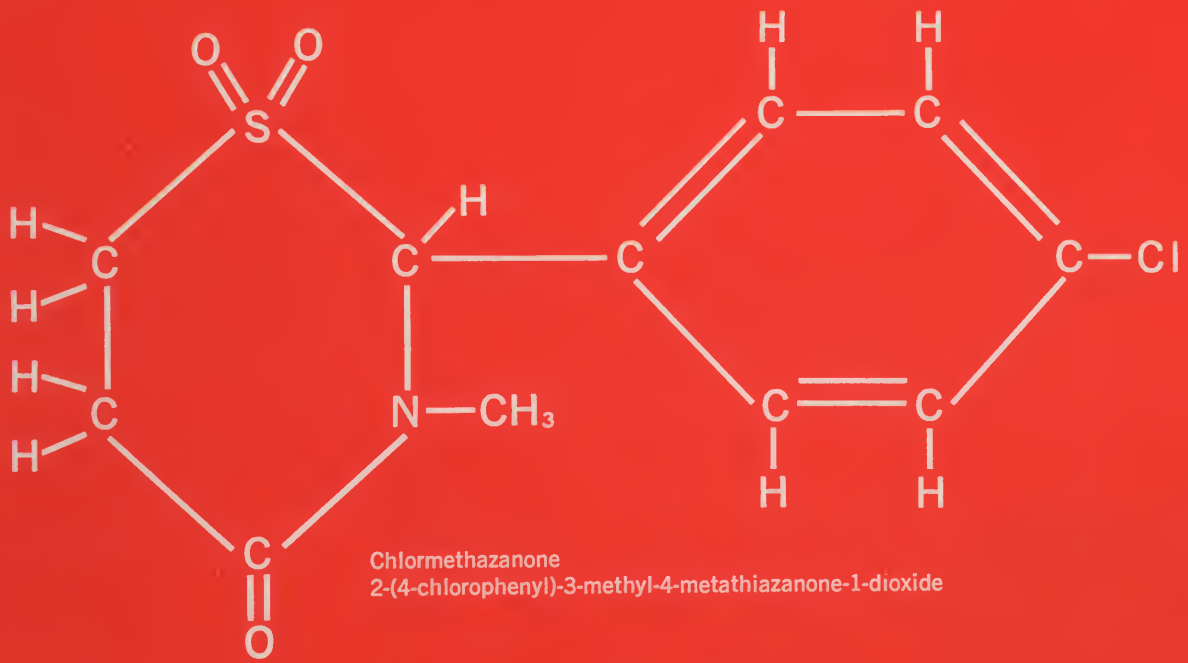
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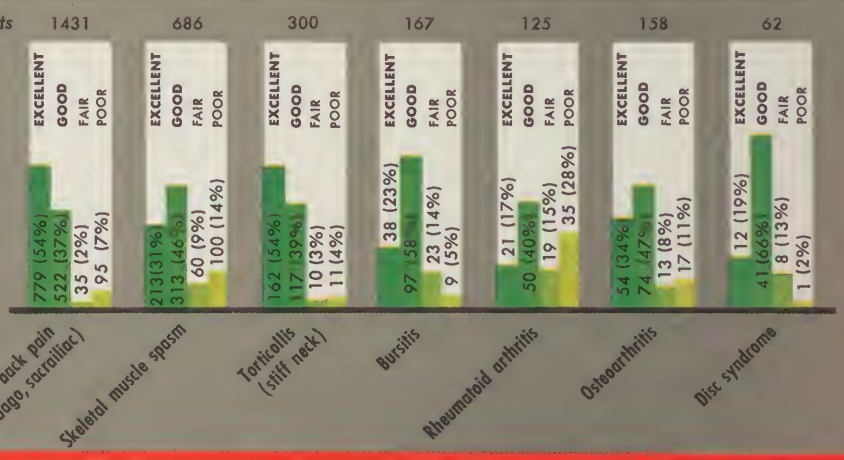
offering new freedom for your patients... from muscle spasm, from tension and anxiety, from side effects

* **tran-qui-lax-ant** (tran'kwi-lak'sant) [< L. tranquillus, quiet; L. laxare, to loosen, as the muscles]

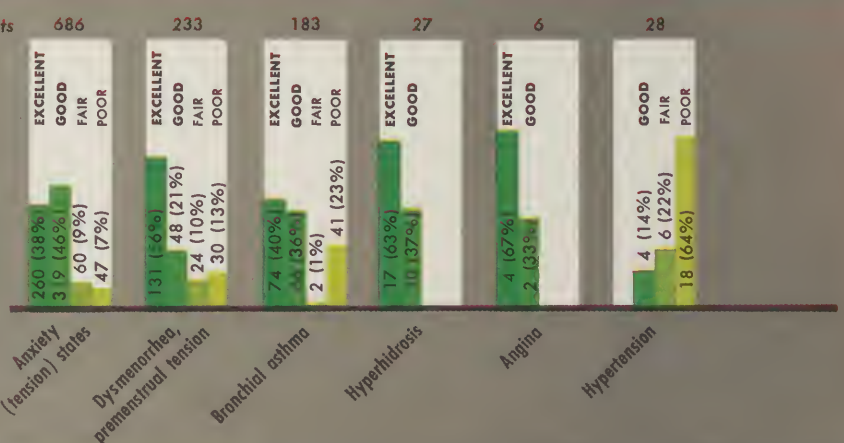
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CLINICAL RESULTS IN 4092 PATIENTS



MUSCULOSKELETAL CONDITIONS
2929 Patients

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PSYCHOGENIC CONDITIONS
1163 Patients

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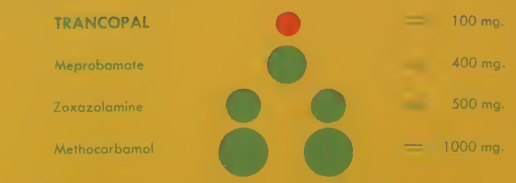
TOTAL 4092 Patients

MAJOR IMPROVEMENT
84%

Compare Trancopal with 3 widely used central relaxants

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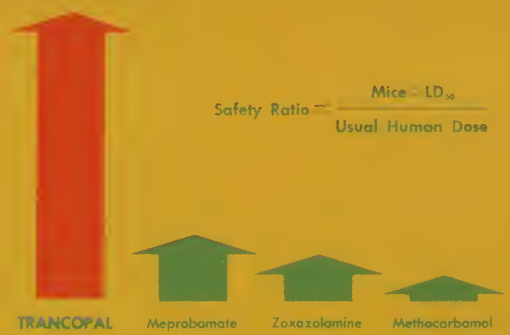
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Daily Dose
Same as above, t.i.d.

Considering the usual human dose, Trancopal, the first true "tranquilaxant," is four to ten times as potent per milligram.

FOR SAFETY



Comparative pharmacologic tests showed that Trancopal is up to thirteen times as safe, or up to thirteen times less toxic. The measure of safety was the LD_{50} in mice/usual human dose.

FOR CLINICAL EFFECTIVENESS



A clinical comparison in low back pain, torticollis, bursitis and anxiety states showed that Trancopal is up to four times as effective. Each of 40 patients received all four drugs in random rotation for several days. While each of the four drugs gave some relief, only the one providing the most effective relief was recorded.

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- Low back pain (lumbago)
- Neck pain (torticollis)
- Bursitis
- Rheumatoid arthritis
- Osteoarthritis
- Disc syndrome
- Fibrositis
- Joint disorders (ankle sprain, tennis elbow, etc.)
- Myositis
- Postoperative myalgias

Psychogenic
- Anxiety and tension states
- Dysmenorrhea
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Neurologic
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• Baker, A. B.: Modern Med. 26:140, April 15, 1958. • Cohen, A. I.: In preparation. • Cooperati Study, Department of Medical Research, Winthrop Laboratories. • Gesler, R. M., and Coulston, F Toxicol. & Appl. Pharmacol. To be published. • Gesler, R. M., and Surrey, A. R.: J. Pharmacol. & Exper Therap. 122:24A, Jan., 1958. • Gesler, R. M., and Surrey, A. R.: J. Pharmacol. & Exper. Therap 122:517, April, 1958. • Lichtman, A. L.: Kentucky Acad. Gen. Pract. J. 4:28, Oct., 1958. • Surrey A. R.; Webb, W. G., and Gesler, R. M.: J. Am. Chem. Soc. 80:3469, July 5, 1958.

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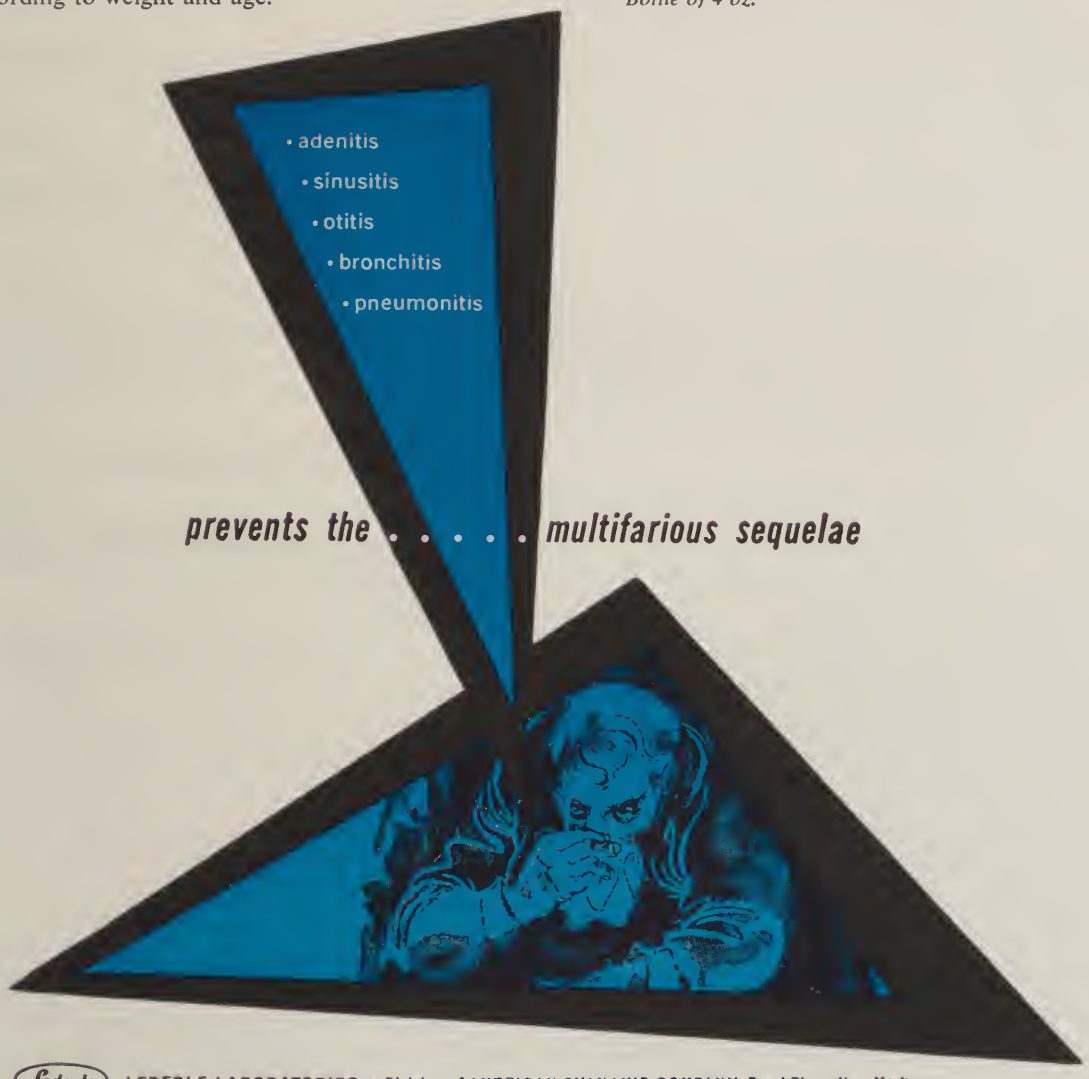
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Exactly how does new Halodrin* restore the "premenopausal prime" in postmenopausal women?

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The normal premenopausal woman excretes estrogens in the urine in the form of estradiol, estrone, and estriol, in an approximate 28-day average ratio of 39:15:46. Starting with this urinary excretion of estrogens, it is possible to calculate backwards and estimate the amount of estradiol that must have been secreted endogenously in order to produce these urinary levels. This is possible because the proportion of estrogens which appears in the urine following parenteral administration has been established in castrated women.

On this basis, the average endogenous output of estrogens is about 160 micrograms per day during a menstrual cycle, and 80 micrograms per day in postmenopausal women (see chart opposite). Therefore, the restoration of the "premenopausal prime" in the postmenopausal woman requires the replacement of approximately the equivalent of the 80 micrograms of estradiol per day that she no longer secretes endogenously.

Oral ethinyl estradiol is about 2 to 2½ times as potent as parenteral estradiol. Therefore, the replacement of 80 micrograms of endogenous estradiol production per day is accomplished by the oral administration of 32 to 40 micrograms of ethinyl estradiol per day.

Each Halodrin tablet contains 20 micrograms of ethinyl estradiol, which means that the recommended dosage of 2 tablets per day provides 40 micrograms of ethinyl estradiol. This offsets the loss of 80 micrograms of endogenous estradiol production in the menopausal woman; i.e., restores the "premenopausal prime."

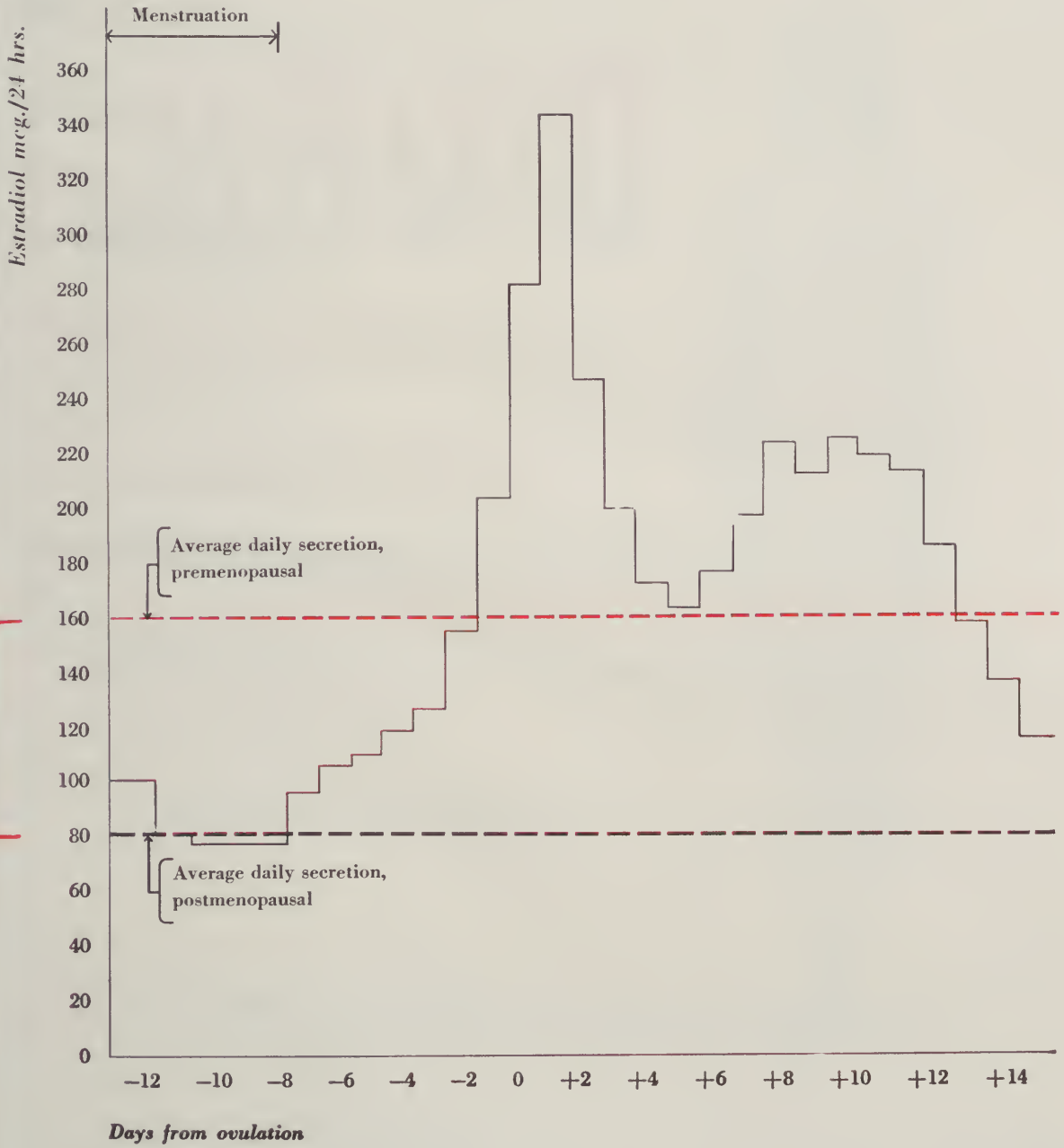
Each Halodrin tablet also contains 1 mg. of Upjohn-developed Halotestin* (fluoxymesterone)—the most potent oral androgen known. The primary purpose is to "buffer" the ethinyl estradiol just enough to prevent breakthrough bleeding, which is obviously undesirable in the menopause. It also exerts other beneficial hormonal effects, one of which, in common with ethinyl estradiol, is a powerful anabolic action so desirable in patients of advanced years.

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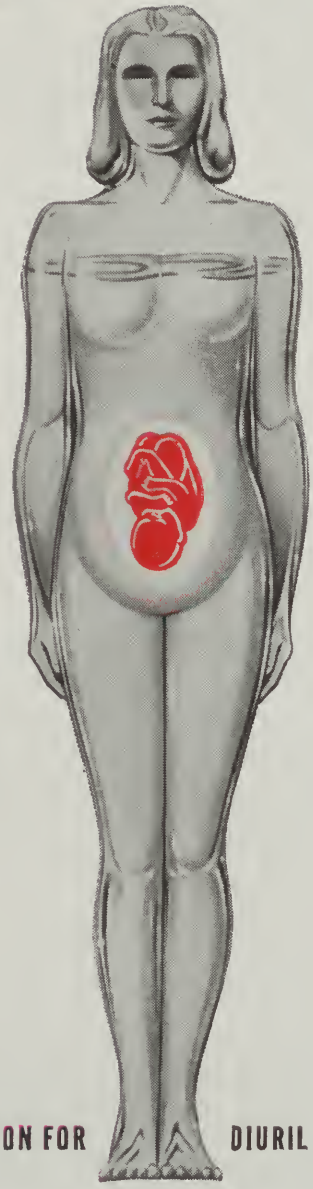
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Other studies show the important role of the B vitamins in antibody formation. Thus, *Nutrition Reviews*[2] reports: "Present evidence indicates that certain B vitamins, notably pyridoxine, pantothenic acid and folacin, play a significant role in antibody synthesis." According to Pollack and Halpern,[3] "Under-nutrition leads to increased susceptibility to infection and decreased resistance to established disease." And "vitamin deficiency states also may adversely influence circulating antibodies."

Halpern[4] reports that "good nutrition is important for optimal resistance to infection, for a superior tissue capability to cope with disease and injury, and for maximum antibody production . . . nutrition participates in the prophylaxis against most acute infections . . ."

And while MacBryde[5] feels that evidence is lacking to support the view that a higher than normal intake of vitamins will improve resistance to infection, he also states: "Restoration of nutrition to normal exerts a favorable influence on practically all disease conditions . . . Often the outcome will depend more upon the correction of the malnutrition than upon any therapy directed toward the malady."

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edited by

Sam A. Overstreet, M.D.

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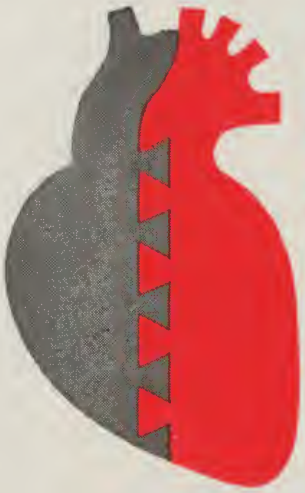
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1. *Friedlander, H. S.: The role of ataraxics in cardiology. Am. J. Card.* **1**:395, *March 1958.*
2. *Shapiro, S.: Observations on the use of meprobamate in cardiovascular disorders. Angiology* **8**:504, *Dec. 1957.*

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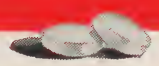
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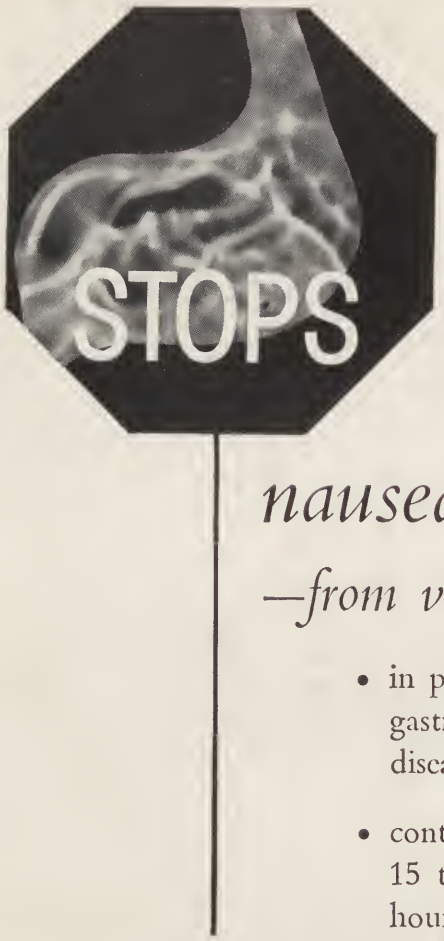
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